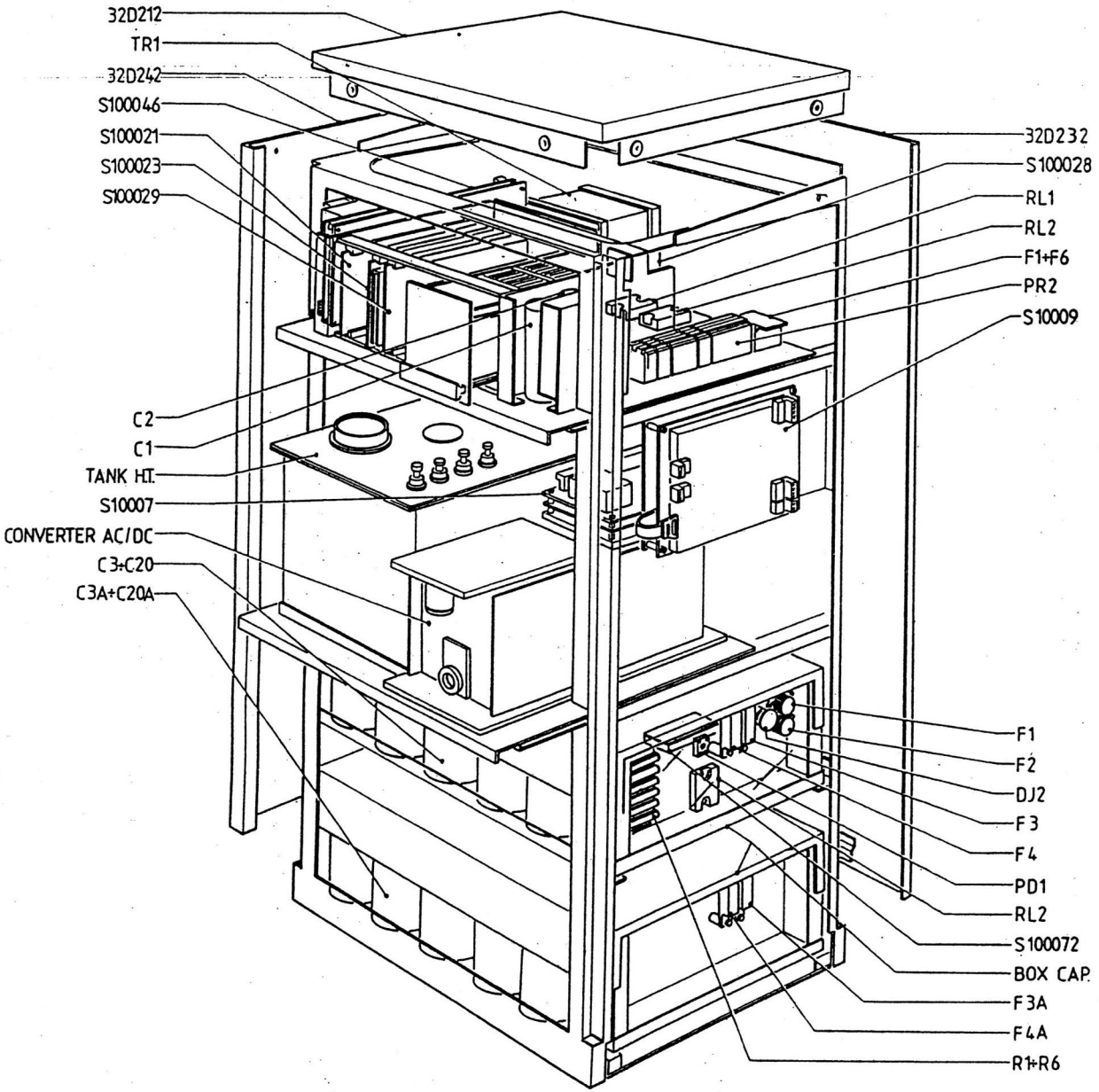
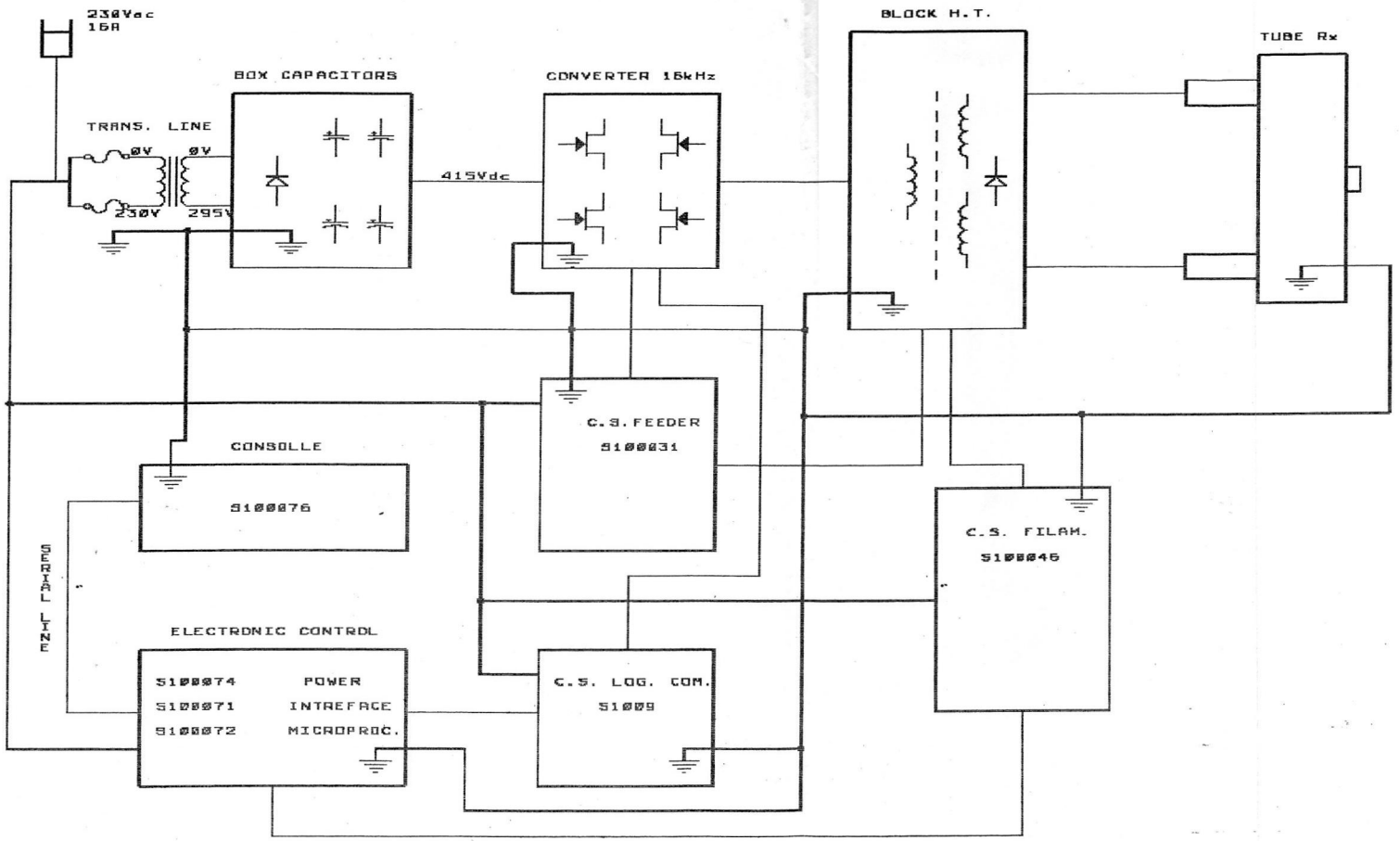
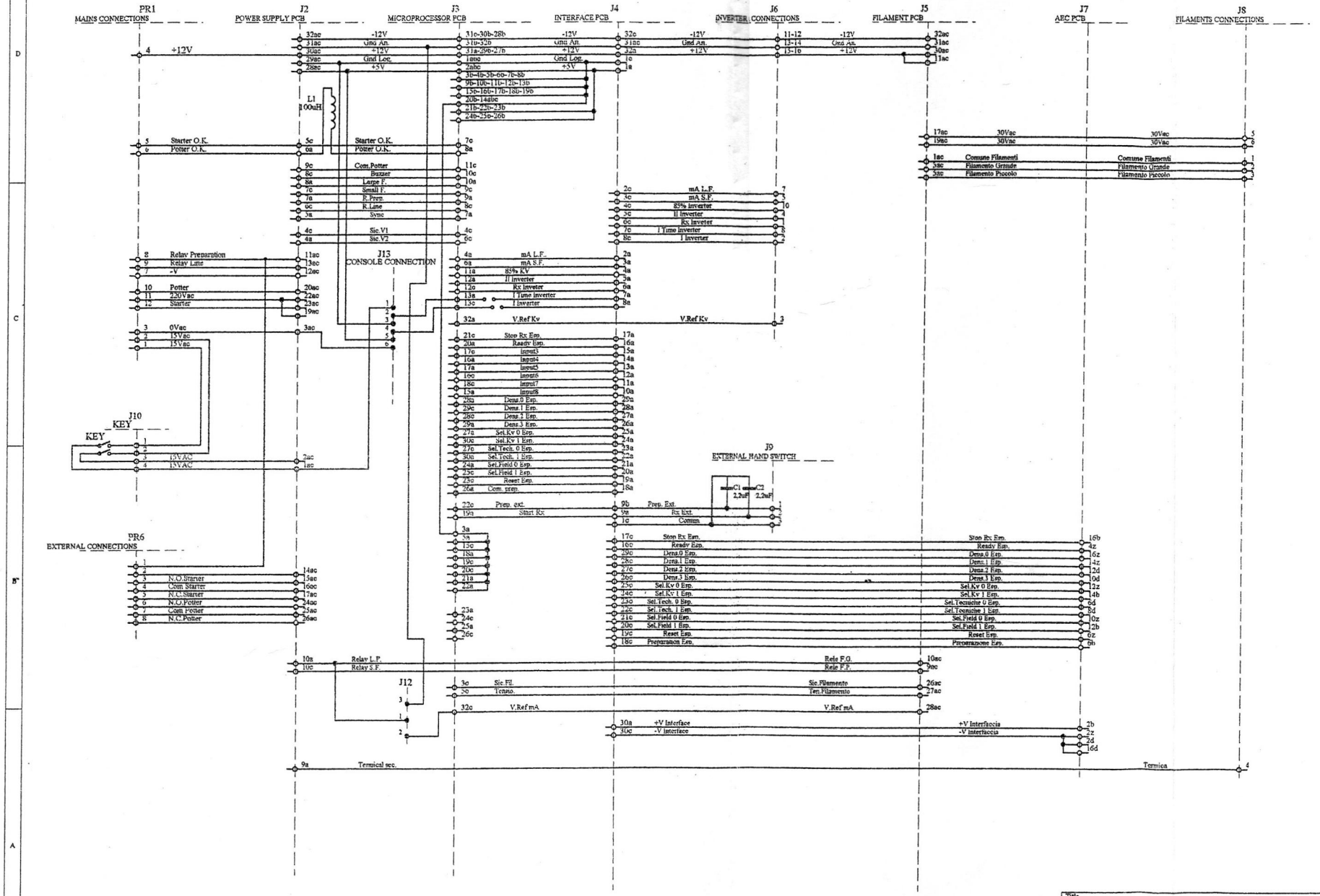

32D212
TR1
32D242
S100046
S100021
S100023
S100029
C2
C1
TANK HI
S10007
CONVERTER AC/DC
C3+C20
C3A+C20A
32D232
S100028
RL1
RL2
F1+F6
PR2
S10009
F1
F2
DJ2
F3
F4
PD1
RL2
S100072
BOX CAP.
F3A
F4A
R1+R6



S000086

Title

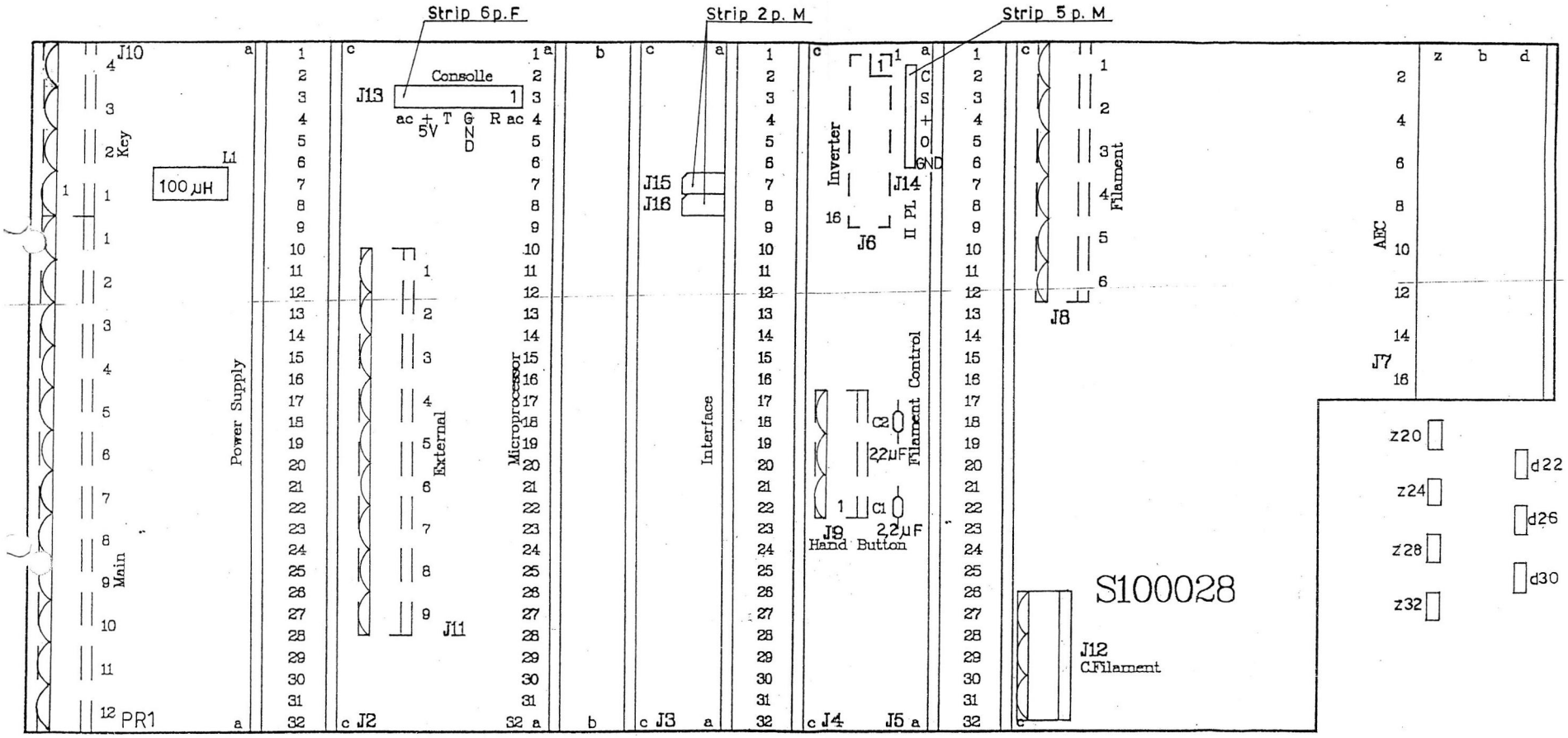
SM66 PRINCIPAL

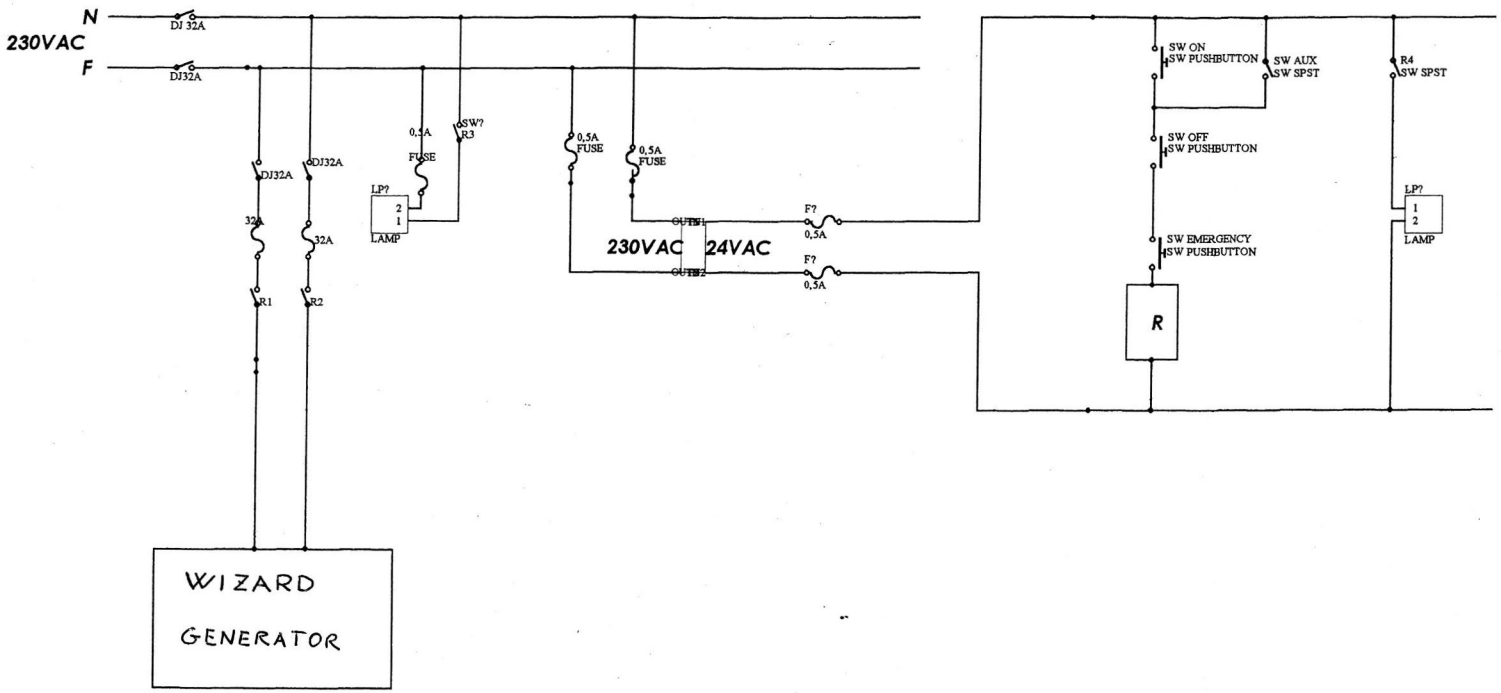


Title	BACK PANNEL	
Size A3	Number S000028	Revision
Date: 18-Feb-2002	Sheet of	
File: C:\CLIENT\BACKPANN.SCH	Drawn By:	

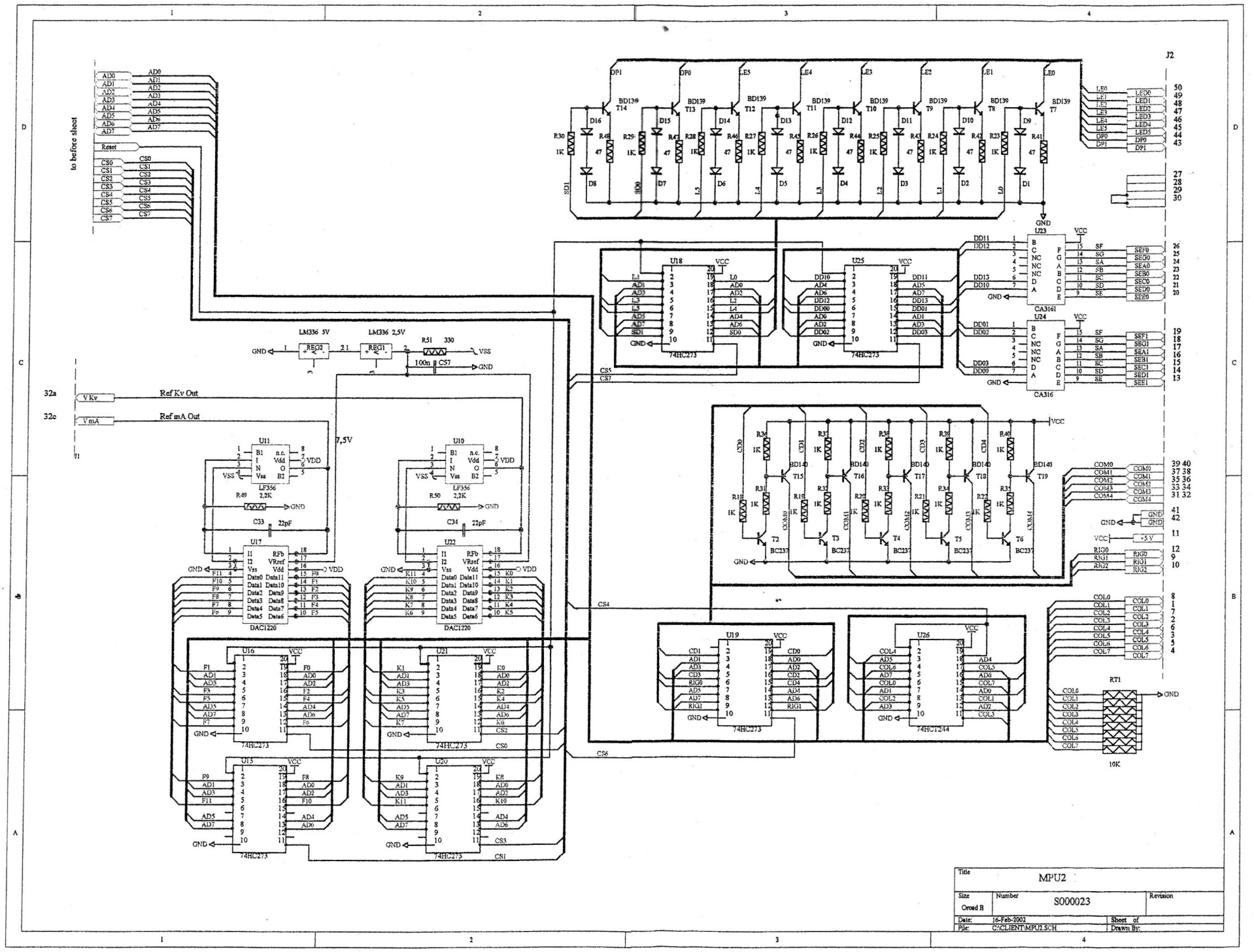
Cod. E 68 S 69

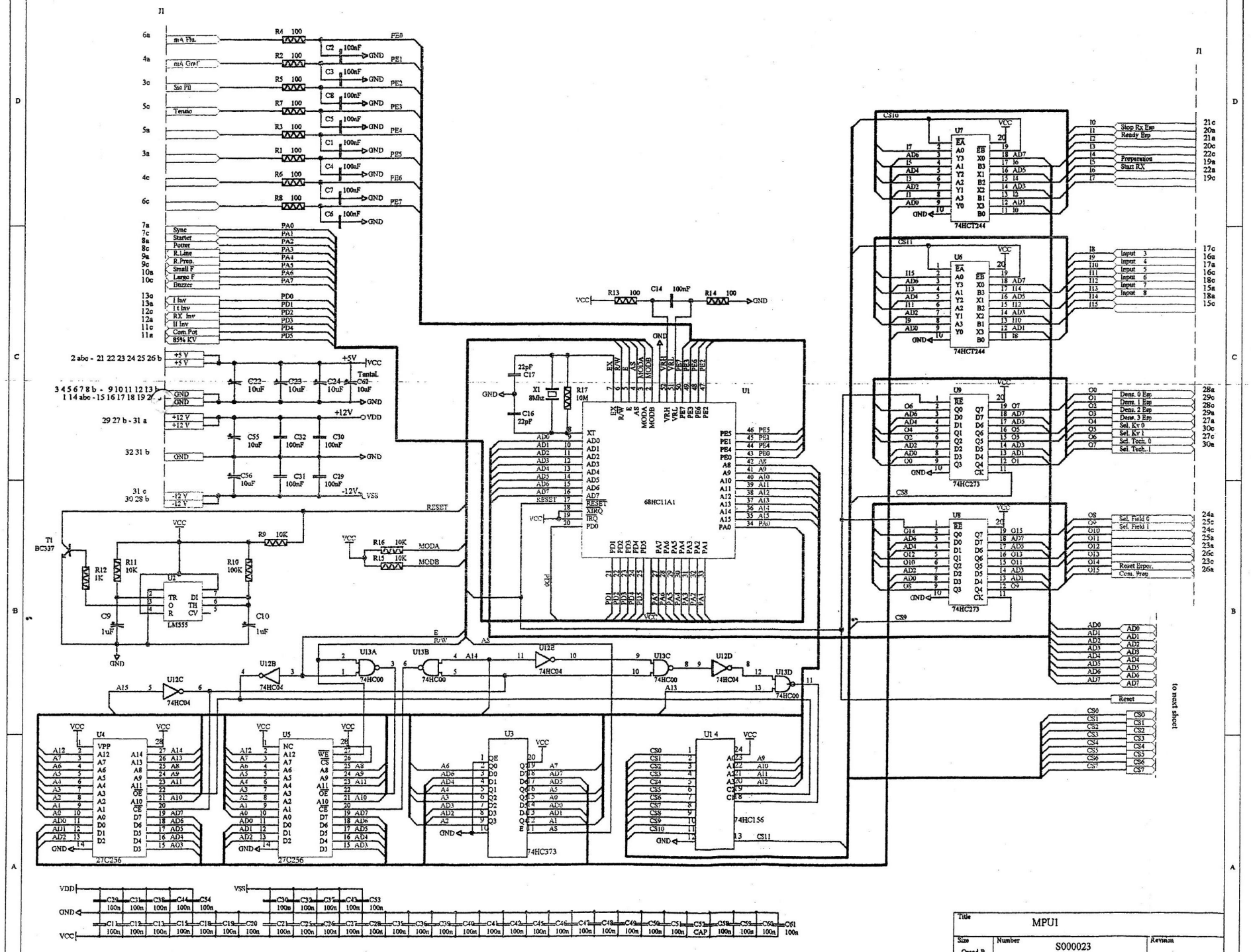
SCHEDA BACK PANEL S100028

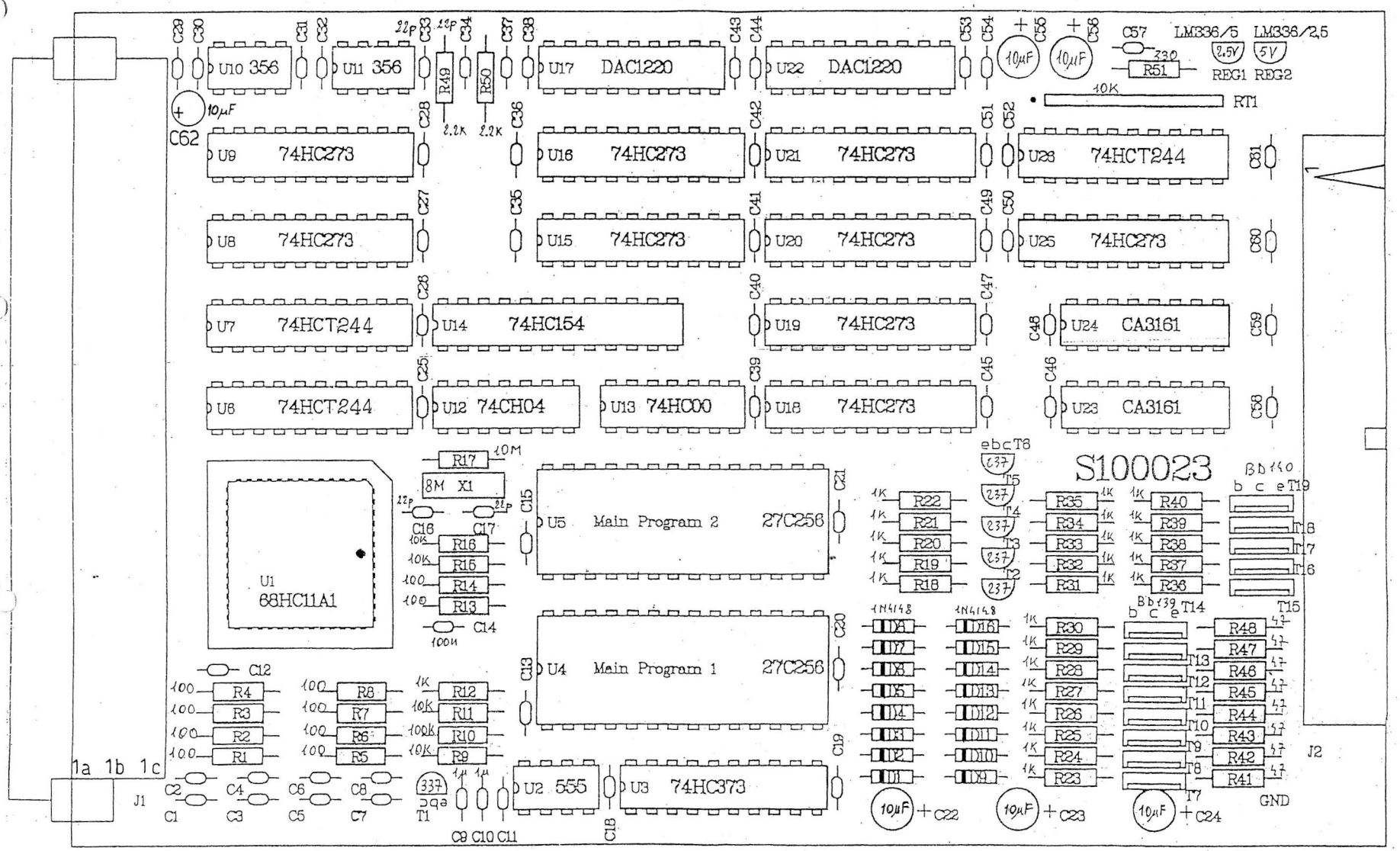




Title	CONNECTION WALL		
Size: B	Number		Revision
Date:	8-Apr-1999	Sheet of	
File:	A:\TOP28CON.SCH	Drawn By:	

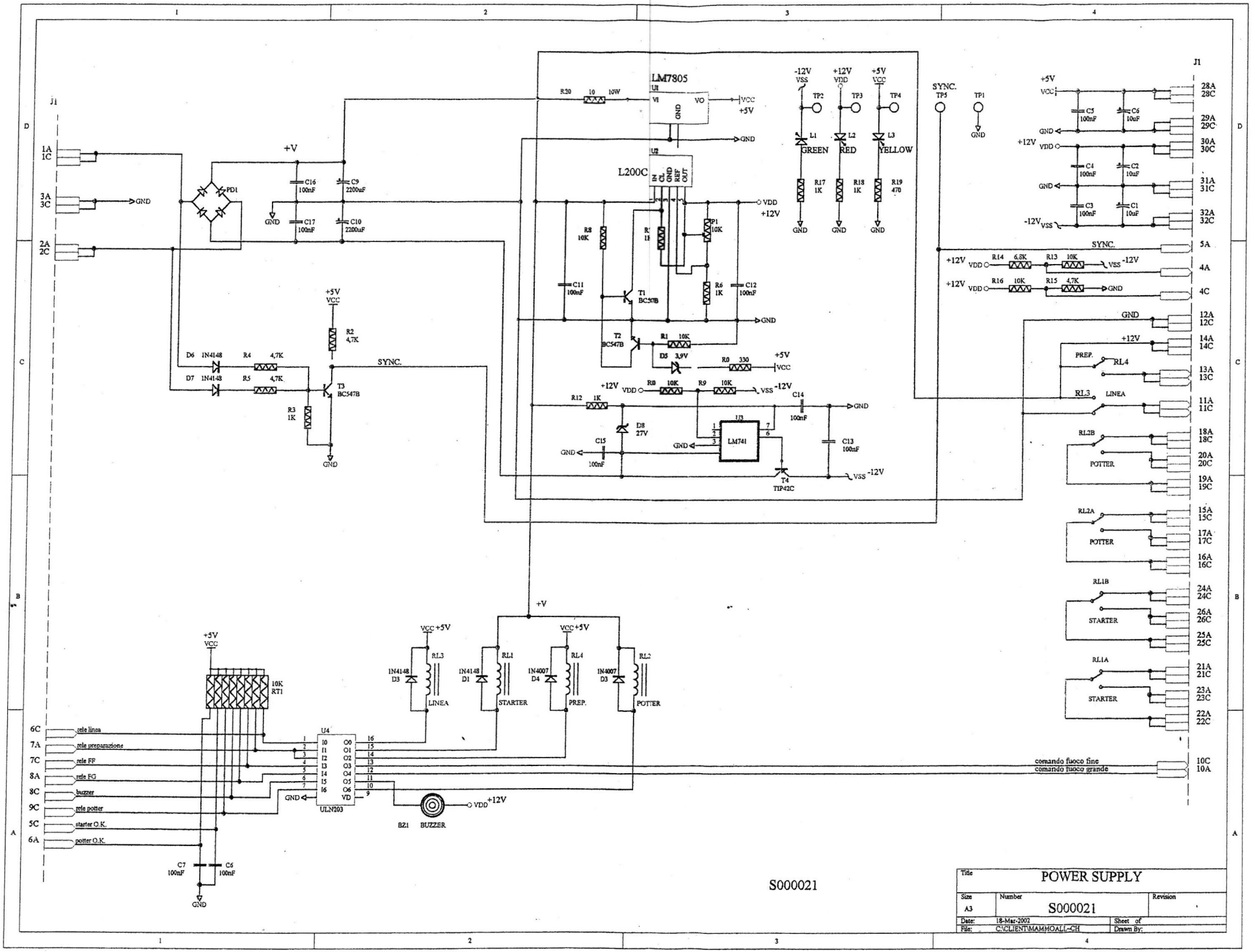

to before sheet
Reset
LM336 5V
LM336 2,5V
Ref Kv Out
Ref mA Out
7,5V
74HC273
DAC1220
LF356
BD139
BD140
BC237
CA3161
CA316
74HC1244
MPU2
S000023
Size
Number
Revision
Date: 16-Feb-2002
File: C:\CLIENT\MPU2.SCH
Sheet of
Drawn By:

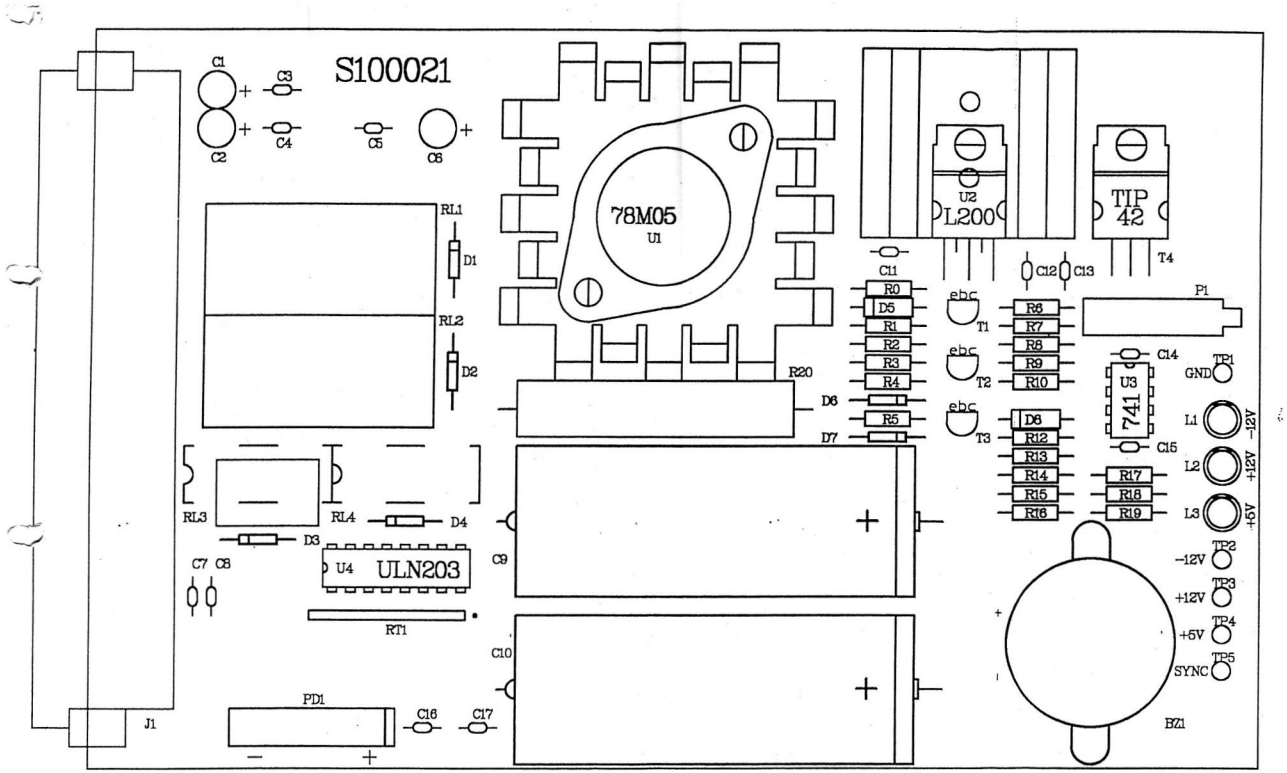

J1
R4 100
R2 100
R5 100
R8 100
R7 100
R3 100
R1 100
R6 100
C2 100nF
C3 100nF
C8 100nF
C5 100nF
C1 100nF
C4 100nF
C7 100nF
C6 100nF
GND
PE0
PE1
PE2
PE3
PE4
PE5
PE6
PE7
Sync
Starter
Potter
R.Line
R.Prep.
Small F
Large F
Buzzer
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
I Inv
I t Inv
RX Inv
II Inv
Com.Pot
85% KV
PD0
PD1
PD2
PD3
PD4
PD5
+5V
+12V
-12V
VCC
VDD
VSS
Tantal.
C22 10uF
C23 10uF
C24 10uF
C62 10uF
C55 10uF
C32 100nF
C30 100nF
C56 10uF
C31 100nF
C29 100nF
R13 100
C14 100nF
R14 100
C17 22pF
C16 22pF
X1 8Mhz
R17 10M
U1
68HC11A1
RESET
MODA
MODB
E
R/W
AS
XT
XIRQ
IRQ
PD0
T1 BC337
R12 1K
R11 10K
R10 100K
R9 10K
R16 10K
R15 10K
U2
LM555
C9 1uF
C10 1uF
U12B
U12C
U13A
U13B
U12E
U13C
U12D
U13D
74HC04
74HC00
A15
A14
A13
U4
U5
27C256
U3
74HC373
U14
74HC156
CS10
CS11
CS8
CS9
U7
U6
U9
U8
74HCT244
74HC273
Stop Rx Esp
Ready Esp
Preparation
Start RX
Input 3
Input 4
Input 5
Input 6
Input 7
Input 8
Dens. 0 Esp.
Dens. 1 Esp.
Dens. 2 Esp.
Dens. 3 Esp.
Sel. Kv 0
Sel. Kv 1
Sel. Tech. 0
Sel. Tech. 1
Sel. Field 0
Sel. Field 1
Reset Espos.
Com. Prep.
Reset
to next sheet
Title
MPU1
Size
Oread B
Number
S000023
Revision
Date:
18-Feb-2002
Sheet of
File:
C:\CLIENT\MPU1.SCH
Drawn By:

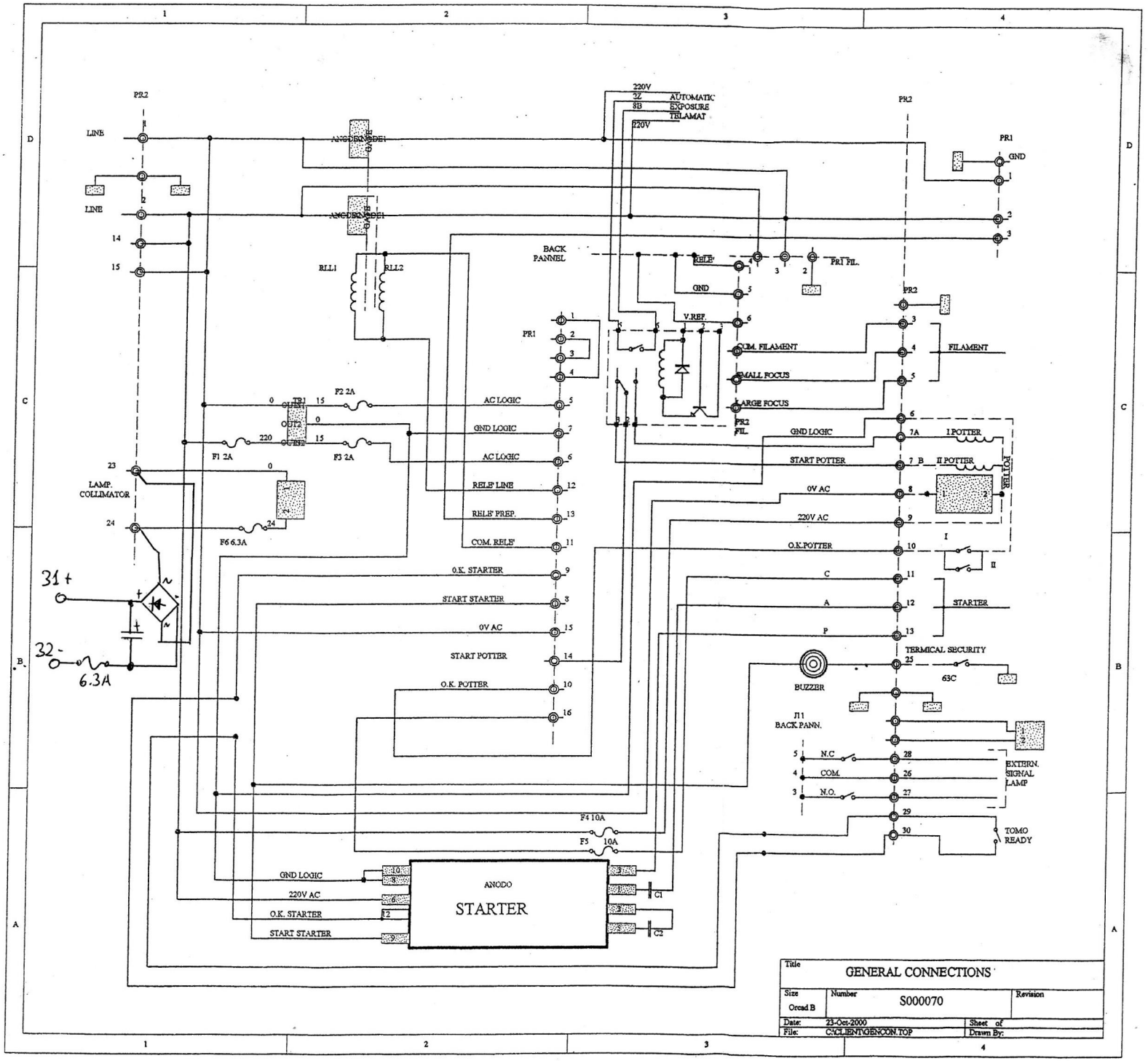


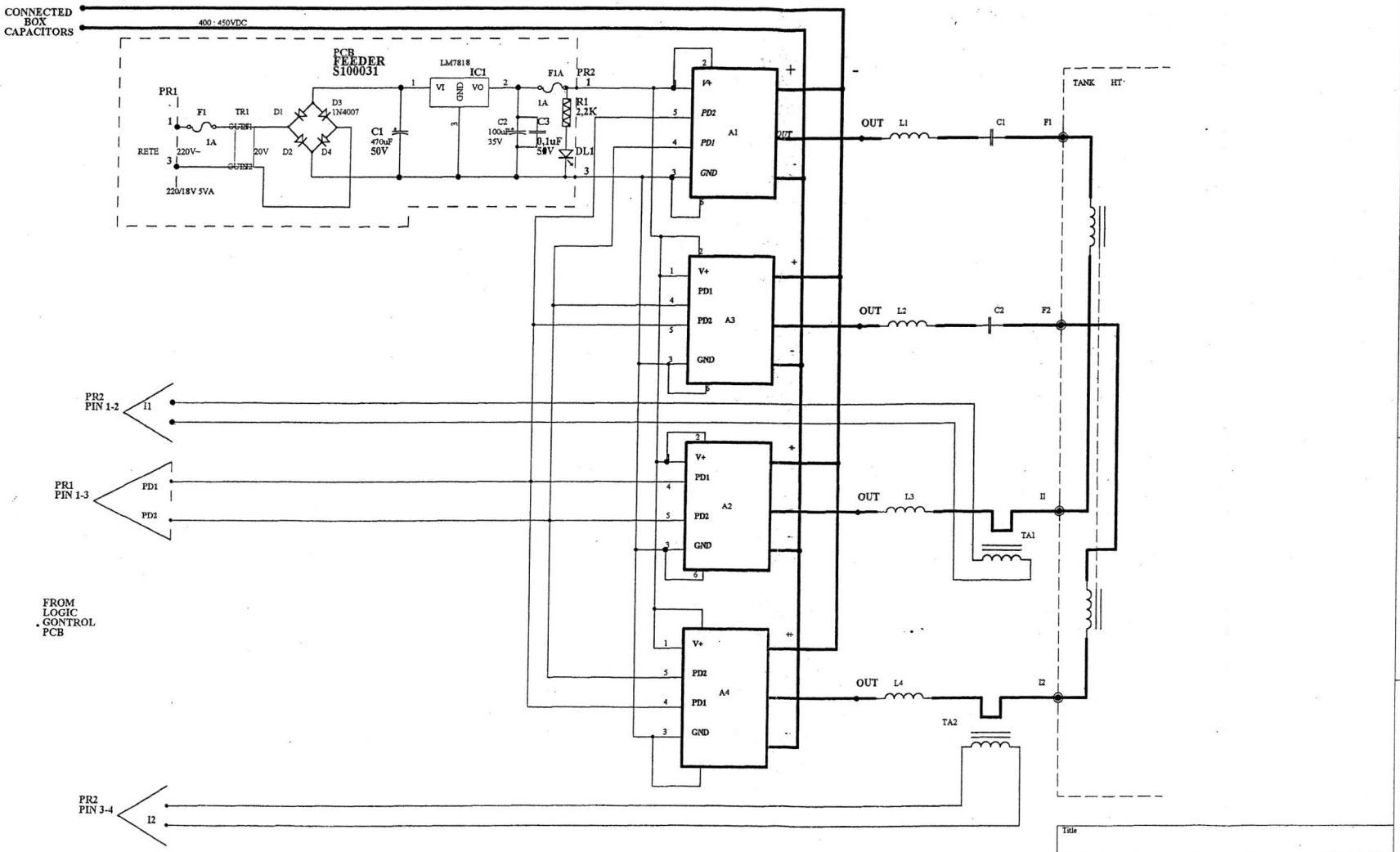
Cod. E 68 S 61

SCHEDA MICROPROCESSORE S100023


LM7805
L200C
LM741
ULN203
GREEN
RED
YELLOW
LINEA
STARTER
PREP.
POTTER
BUZZER
SYNC.
+V
+5V
+12V
-12V
GND
rele linea
rele preparazione
rele FF
rele FG
buzzer
rele potter
starter O.K.
potter O.K.
comando fuoco fine
comando fuoco grande
S000021
POWER SUPPLY
Size A3
Number S000021
Revision
Date: 18-Mar-2002
Sheet of
File: C:\CLIENT\MAMMOALL-CH
Drawn By:


S100021
C1
C2
C3
C4
C5
C6
78M05
U1
U2
L200
TIP
42
T4
RL1
RL2
D1
D2
RL3
RL4
D3
D4
U4
ULN203
C7
C8
RT1
PD1
C16
C17
J1
C9
C10
C11
C12
C13
R0
D5
R1
R2
R3
R4
R20
D6
R5
D7
ebc
T1
T2
T3
R6
R7
R8
R9
R10
D8
R12
R13
R14
R15
R16
P1
C14
U3
741
C15
R17
R18
R19
TP1
GND
L1
L2
L3
-12V
+12V
+5V
TP2
TP3
TP4
SYNC
TP5
BZ1


PR2
LINE
LINE
14
15
ANODO DE1
ANODO DE2
RLL1
RLL2
220V
3Z AUTOMATIC
3B EXPOSURE
TELAMAT
220V
BACK PANNEL
RELE'
GND
V.REF.
PR1 FIL.
PR1
PR2
PR1
GND
COM. FILAMENT
SMALL FOCUS
LARGE FOCUS
PR2 FIL.
FILAMENT
TR1
OUT1
OUT2
F2 2A
F1 2A
F3 2A
AC LOGIC
GND LOGIC
AC LOGIC
RELE' LINE
RELE' PREP.
COM. RELE'
0.K. STARTER
START STARTER
0V AC
START POTTER
O.K. POTTER
GND LOGIC
START POTTER
I POTTER
II POTTER
POTTER
0V AC
220V AC
O.K.POTTER
C
A
P
STARTER
TERMICAL SECURITY
63C
BUZZER
J11
BACK PANN.
N.C
COM.
N.O.
EXTERN. SIGNAL LAMP
TOMO READY
LAMP. COLLIMATOR
F6 6.3A
31 +
32 -
6.3A
F4 10A
F5 10A
GND LOGIC
220V AC
O.K. STARTER
START STARTER
ANODO
STARTER
C1
C2
Title
GENERAL CONNECTIONS
Size
Oread B
Number
S000070
Revision
Date:
23-Oct-2000
Sheet of
File:
C:\CLIENTO\GENCON.TOP
Drawn By:



Title			
Size: Oread B	Number:	$	Revision:
	CONVERTER AC/DC DC/AC 16 KHz		
Date: 12-Jan-2000		Sheet of	
File: C:\CLIENT\SM1.~CH		Drawn By:	

SM1

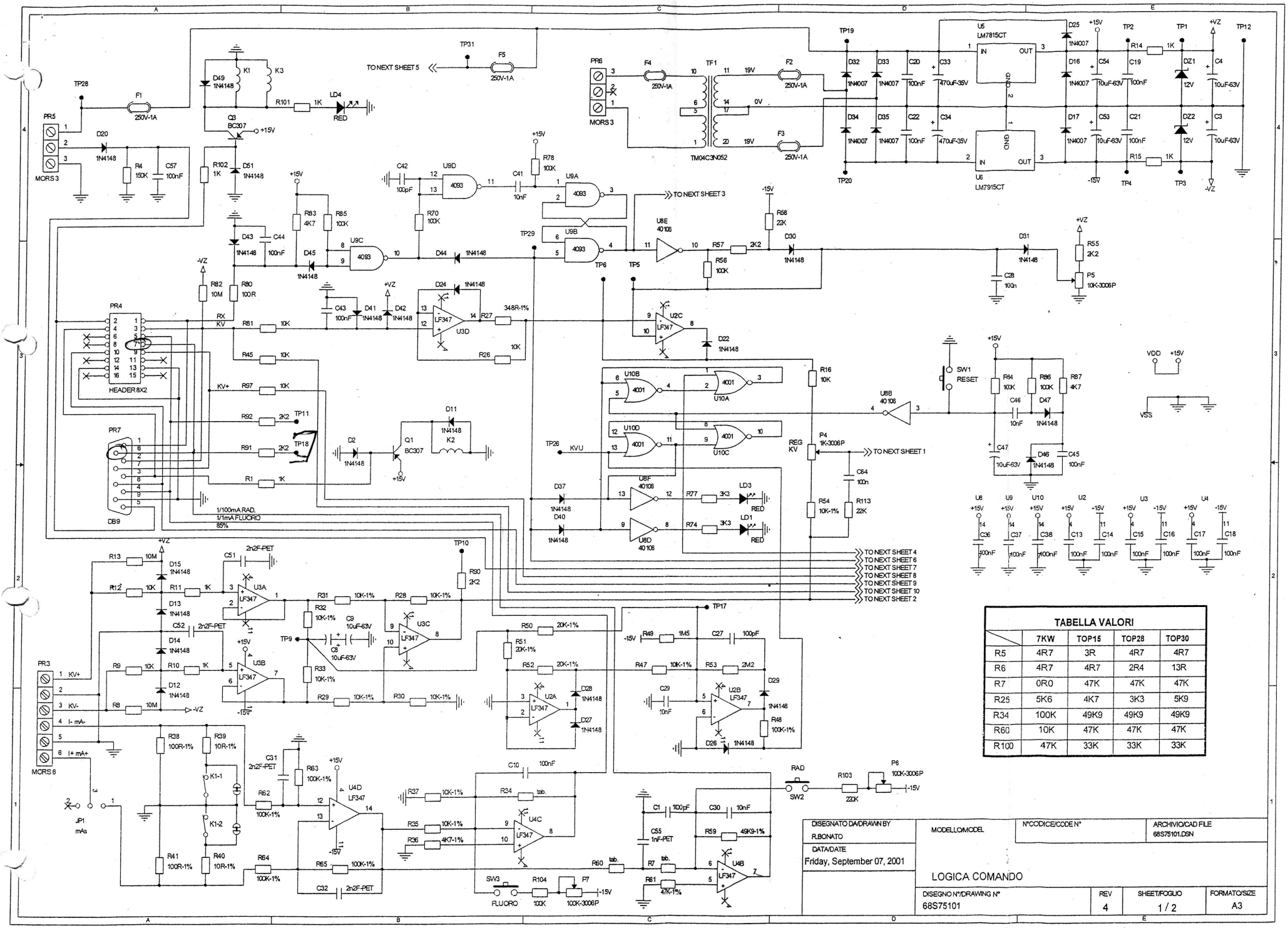


TABELLA VALORI				
	7KW	TOP15	TOP28	TOP30
R5	4R7	3R	4R7	4R7
R6	4R7	4R7	2R4	13R
R7	0R0	47K	47K	47K
R25	5K6	4K7	3K3	5K9
R34	100K	49K9	49K9	49K9
R60	10K	47K	47K	47K
R100	47K	33K	33K	33K

DISEGNATO DA/DRAWN BY: R.BONATO	MODELLO/MODEL	N°CODICE/CODE N°	ARCHIVIO/CAD FILE: 68S75101.DSN
DATA/DATE: Friday, September 07, 2001	LOGICA COMANDO		
	DISEGNO N°/DRAWING N°: 68S75101	REV: 4	SHEET/FOGLIO: 1 / 2 — FORMATO/SIZE: A3

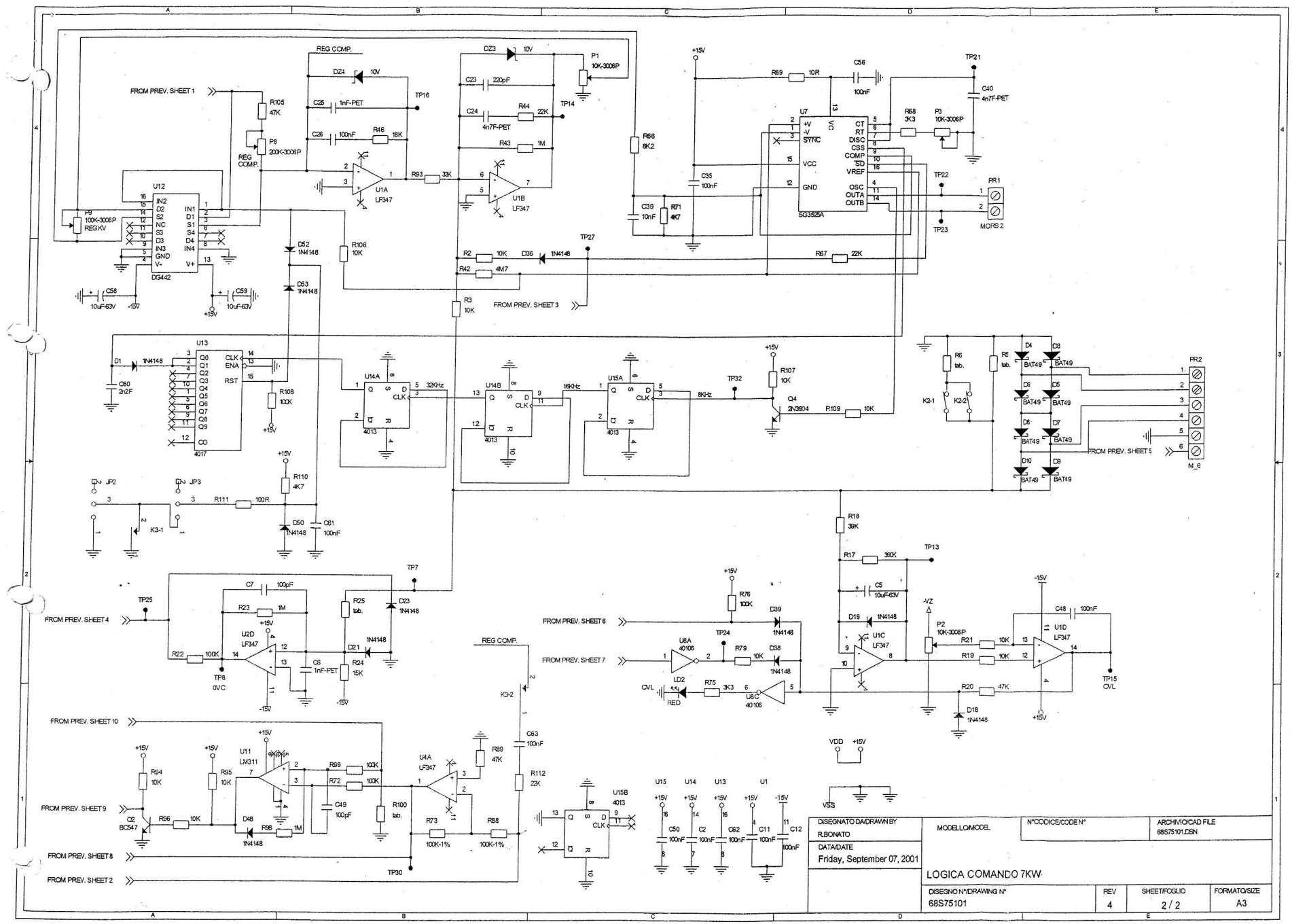

REG COMP.
FROM PREV. SHEET 1
R105 47K
P8 200K-3006P
REG COMP.
DZ4 10V
C25 1nF-PET
C26 100nF
R46 18K
TP16
U1A LF347
R93 33K
DZ3 10V
P1 10K-3006P
C23 220pF
C24 4n7F-PET
R44 22K
TP14
R43 1M
U1B LF347
R66 8K2
U12
DG442
P9 100K-3006P REG KV
C58 10uF-63V
C59 10uF-63V
D52 1N4148
D53 1N4148
R106 10K
R2 10K
D36 1N4148
R42 4M7
TP27
R3 10K
FROM PREV. SHEET 3
+15V
R69 10R
C56 100nF
TP21
C40 4n7F-PET
U7
SG3525A
R68 3K3
P3 10K-3006P
TP22
TP23
PR1
MORS 2
C35 100nF
C39 10nF
R71 4K7
R67 22K
U13
CD4017
D1 1N4148
C60 2n2F
R108 100K
U14A 4013
U14B 4013
U15A 4013
16KHz
8KHz
32KHz
TP32
R107 10K
Q4 2N3904
R109 10K
R5 tab.
K2-1
D4 BAT49
D3 BAT49
D6 BAT49
D5 BAT49
D8 BAT49
D7 BAT49
D10 BAT49
D9 BAT49
PR2
FROM PREV. SHEET 5
M_6
JP2
JP3
K3-1
R110 4K7
R111 100R
D50 1N4148
C61 100nF
R18 39K
R17 390K
TP13
C5 10uF-63V
D19 1N4148
-VZ
P2 10K-3006P
R21 10K
R19 10K
R20 47K
D18 1N4148
U1C LF347
U1D LF347
C48 100nF
TP15 CVL
FROM PREV. SHEET 6
R76 100K
D39 1N4148
TP24
FROM PREV. SHEET 7
U8A 40106
R79 10K
D38 1N4148
CVL
LD2 RED
R75 3K3
U8C 40106
FROM PREV. SHEET 4
TP25
C7 100pF
R23 1M
R25 tab.
D23 1N4148
TP7
U2D LF347
R22 100K
D21 1N4148
R24 15K
C8 1nF-PET
TP8 0VC
FROM PREV. SHEET 10
FROM PREV. SHEET 9
FROM PREV. SHEET 8
FROM PREV. SHEET 2
U11 LM311
R94 10K
R95 10K
R96 10K
Q2 BC547
R98 1M
D48 1N4148
R99 100K
R72 100K
C49 100pF
R100 tab.
U4A LF347
R89 47K
R112 22K
C63 100nF
R73 100K-1%
R88 100K-1%
TP30
K3-2
REG COMP.
U15B 4013
VDD +15V
VSS
U15 U14 U13 U1
C50 100nF
C2 100nF
C62 100nF
C11 100nF
C12 100nF
DISEGNATO DA/DRAWN BY
R.BONATO
DATA/DATE
Friday, September 07, 2001
MODELLO/MODEL
N°CODICE/CODE N°
ARCHIVIO/CAD FILE
68S75101.DSN
LOGICA COMANDO 7KW
DISEGNO N°/DRAWING N°
68S75101
REV
4
SHEET/FOGLIO
2 / 2
FORMATO/SIZE
A3

FIGURE N.3

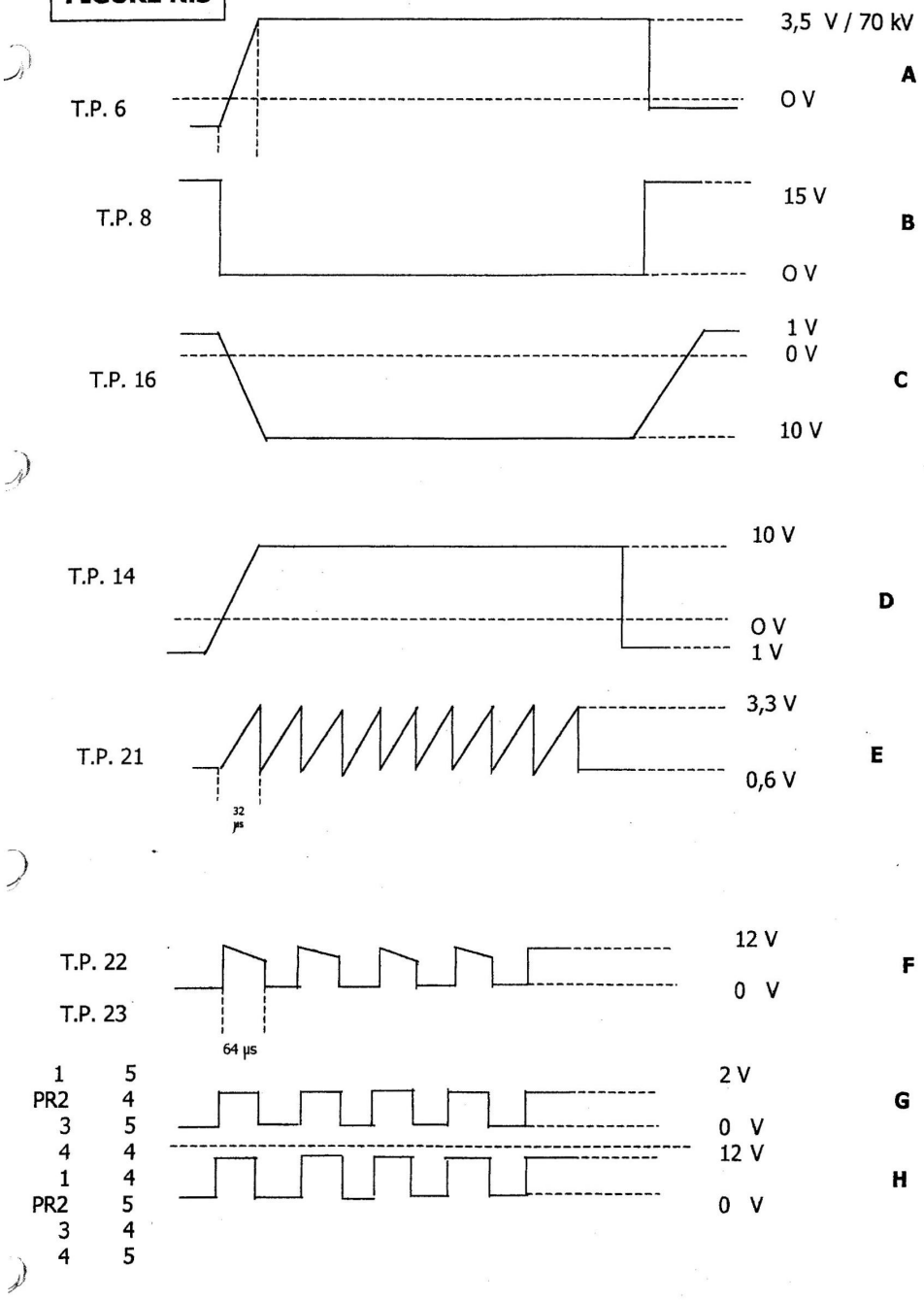
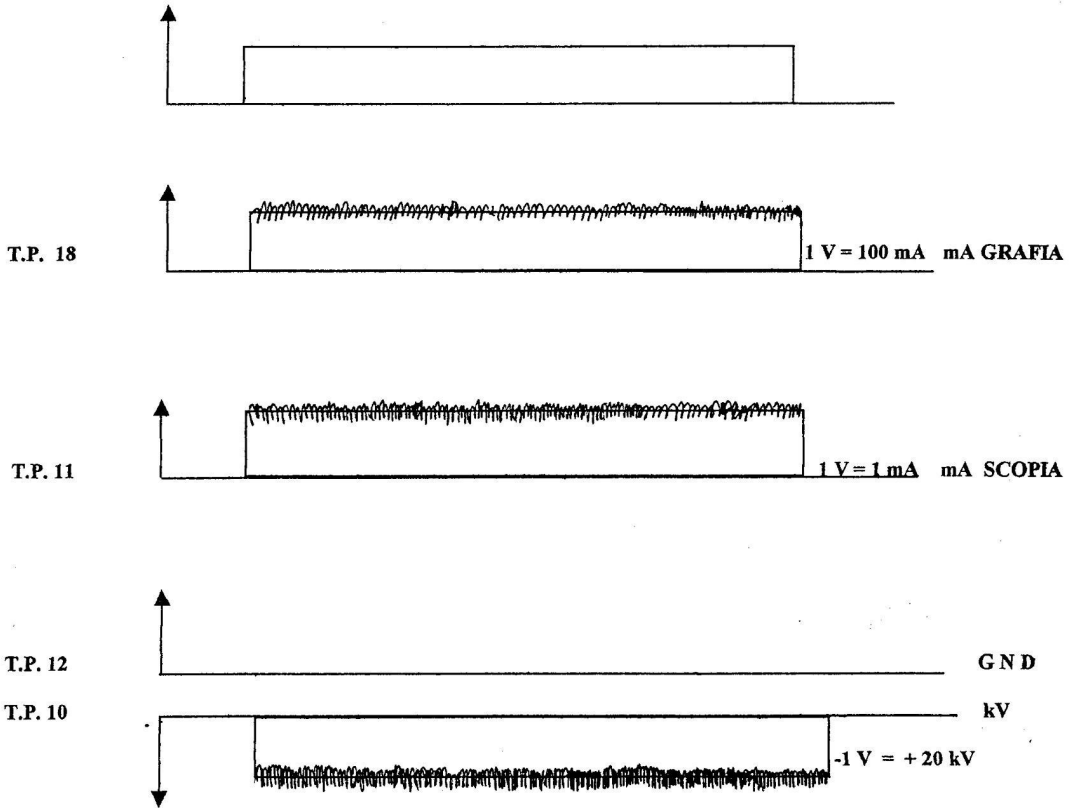
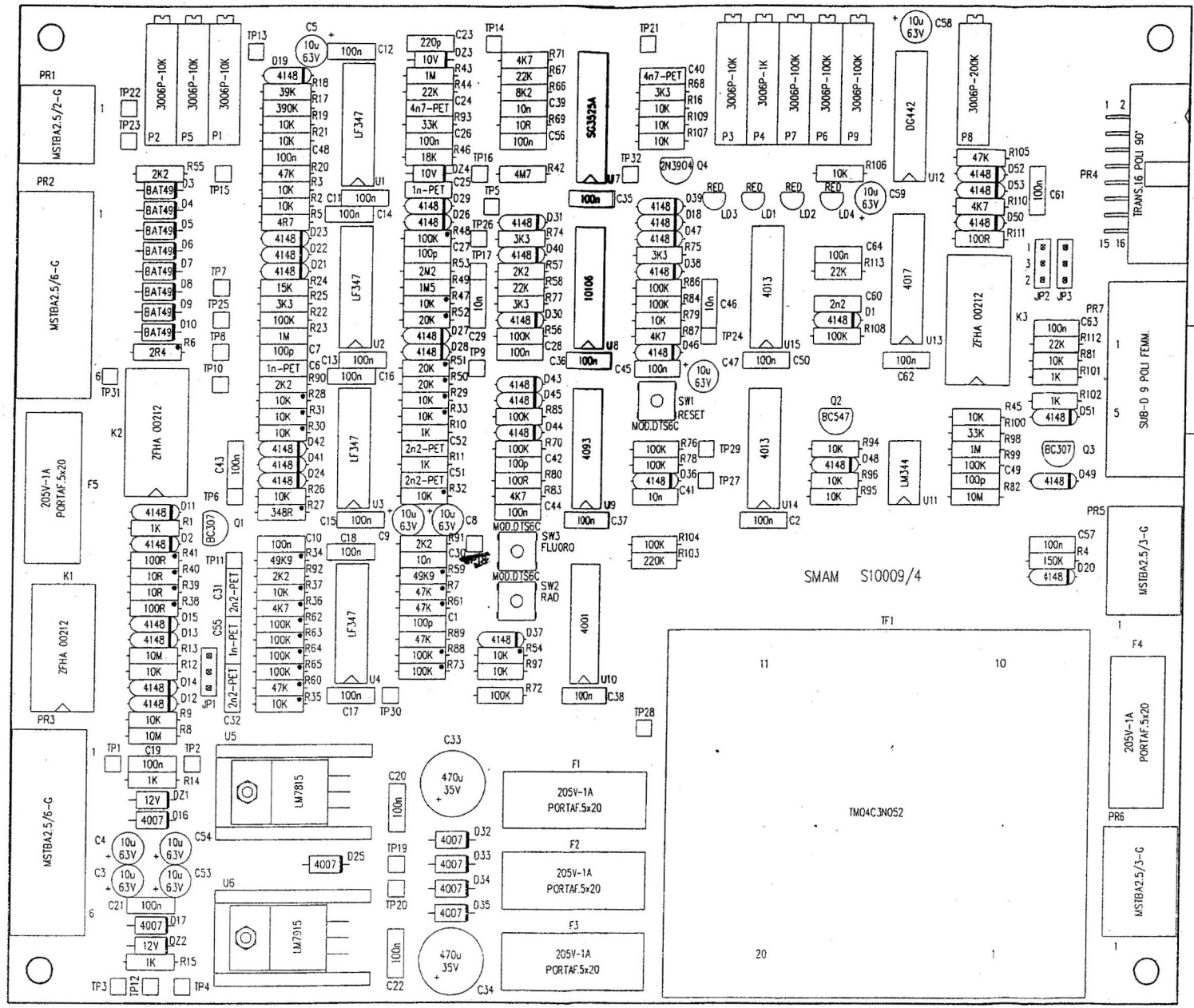

3,5 V / 70 kV
A
T.P. 6
0 V
15 V
T.P. 8
B
0 V
1 V
0 V
T.P. 16
C
10 V
10 V
T.P. 14
D
0 V
1 V
3,3 V
T.P. 21
E
0,6 V
32 µs
12 V
T.P. 22
F
T.P. 23
0 V
64 µs
1 5
PR2 4
3 5
4 4
1 4
PR2 5
3 4
4 5
2 V
G
0 V
12 V
H
0 V

FIGURE n.4


T.P. 18
1 V = 100 mA
mA GRAFIA
T.P. 11
1 V = 1 mA
mA SCOPIA
T.P. 12
G N D
T.P. 10
kV
-1 V = + 20 kV



TP12 = GND

TP30 = 1V = 20kHz

TP18 = 1V = 100mA

PIANO DI MONTAGGIO
VISTA LC

NOTE

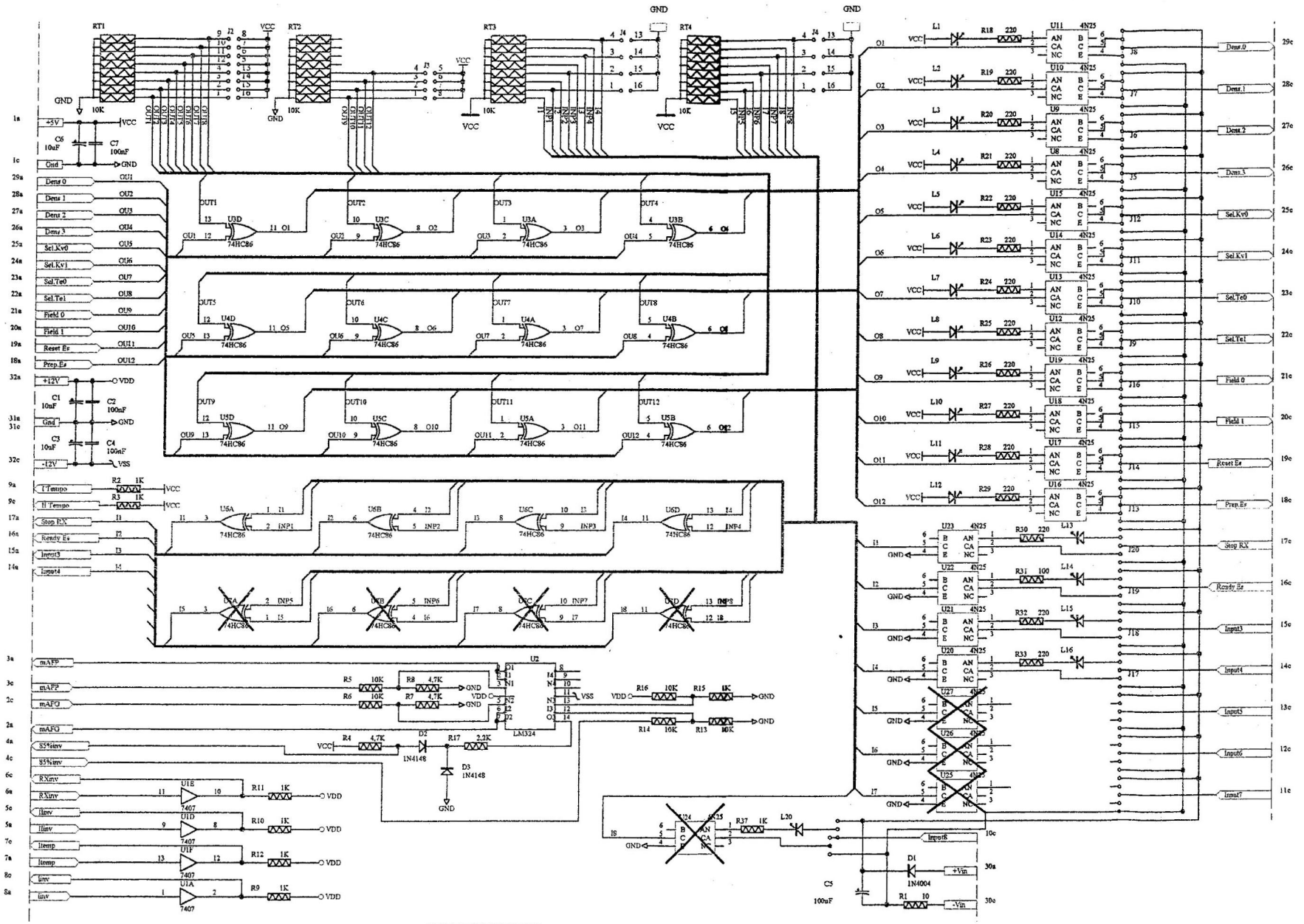
- ● : RESISTENZE TOLL.1%

INDICE INDEX	REVISIONE REVISION	DATA DATE	APPROVATO DA APPROVED BY
EMISSIONE	REV.00	11/01/02	M.M.

DATA DATE	DISEGNATO DA DRAWN BY	DESCRIZIONE DESCRIPTION	N° CODICE CODE N°	ARCHIVIO CAD FILE
11/01/02	M.MATTAVELLI	SCHEDA LOG.COM. S10009/4 -	10 S09 68S75001E1	68S754E1.DWG

DISEGNO DI PROPRIETA' AMEL s.r.l. è vietata la riproduzione e la diffusione senza la nostra preventiva approvazione.
DRAWN IS PROPERTY OF AMEL s.r.l. Reproduction and diffusion without the company permission is forbidden

DISEGNO N° DRAWING N°	REVISIONE REVISION	FOGLIO SHEET	FORMATO SIZE
68S754E1	01	1/1	A3

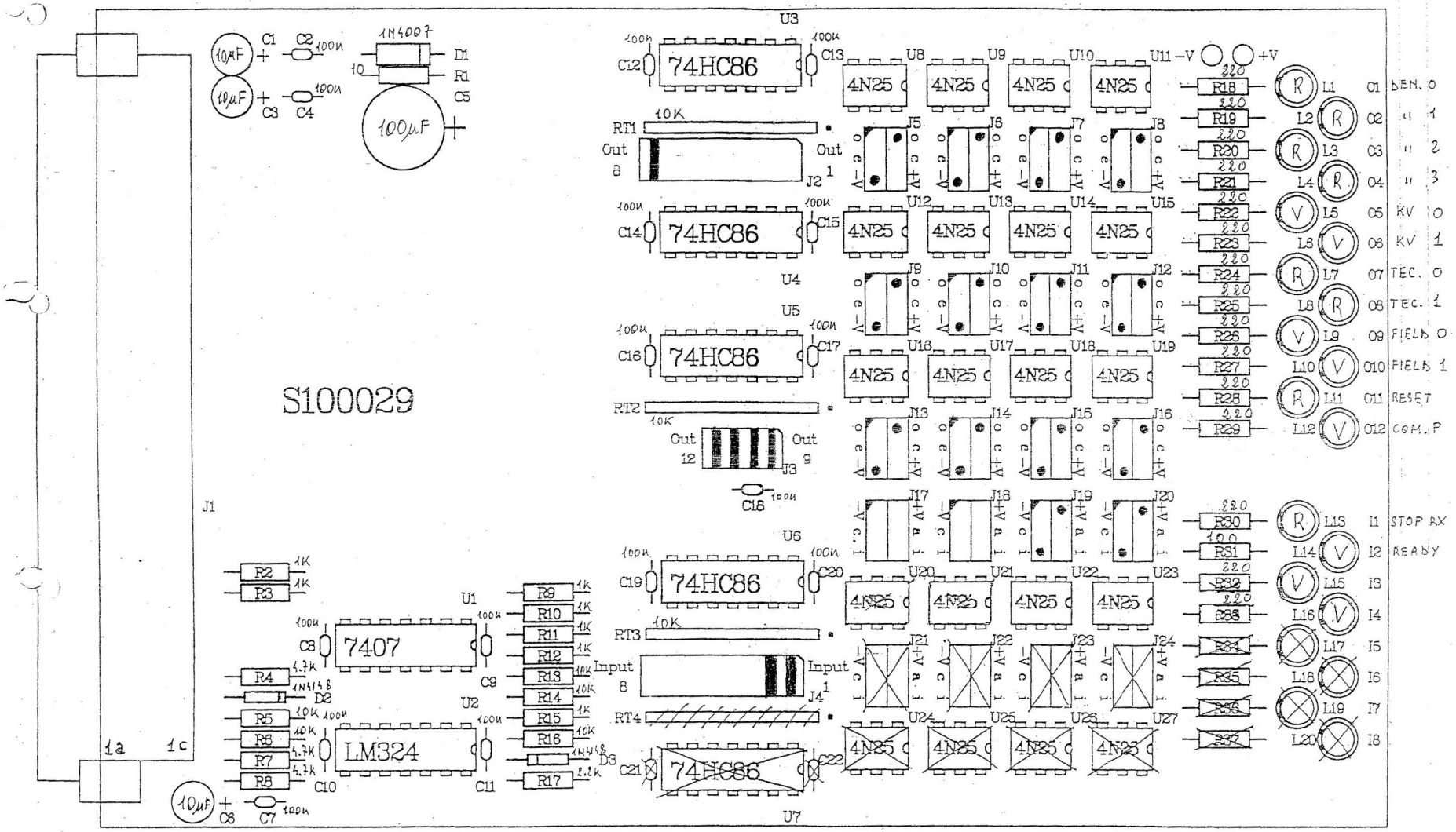


PCB INTERFACE

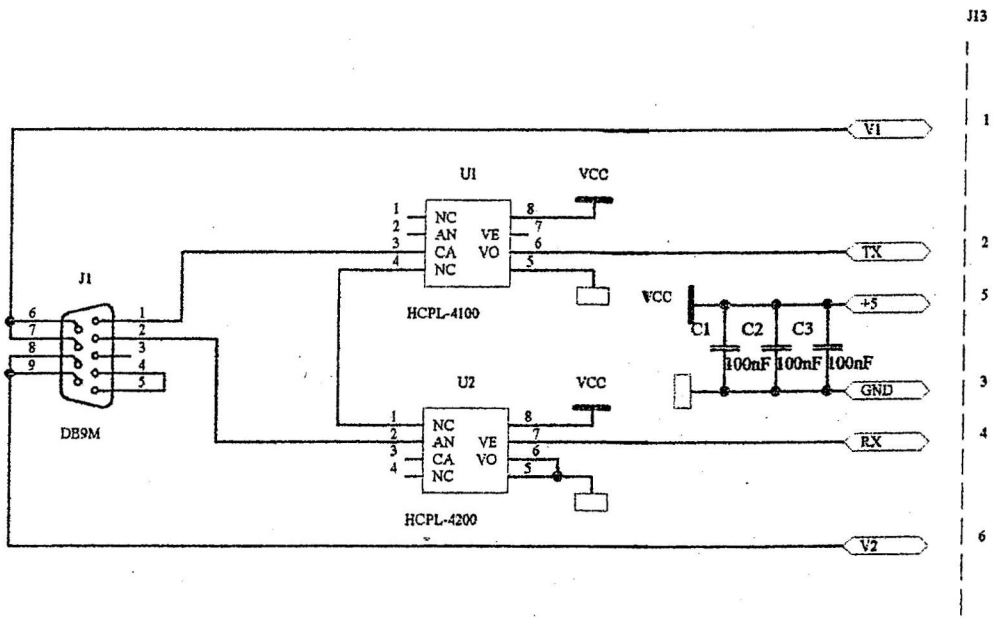
S000071

U1=7406
R8=22K
R7-R4-D2-R14= TOGLIERE
TAGLIARE PISTA = 7a
CORTOCIRCUITARE= 4a-4c

Title	INTERFACE INPUT OUTPUT		
Size: Orcad B	Number: S000071		Revision:
Date: 24-Jan-2002			Sheet of
File: C:\CLIENT\MAMMOINT.SCH			Drawn By:

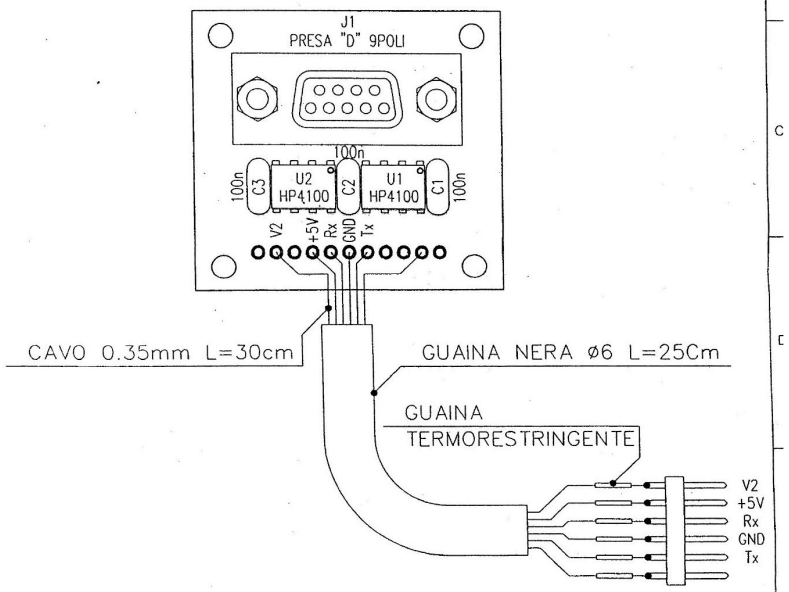


SCHEDA INTERF. TOP601IF S100029 Cod. E68S68



Title	CONSOLE INTERFACE		
Size: Orcad A	Number: S000096		Revision:
Date: 15-Apr-2002		Sheet of	
File: C:\CLIENT\S000096.SCH		Drawn By:	

PIANO DI MONTAGGIO
VISTA LC



INDICE INDEX	REVISIONE REVISION	DATA DATE	APPROVATO DA APPROVED BY
EMISSIONE	REV.00	22/12/00	M.M.

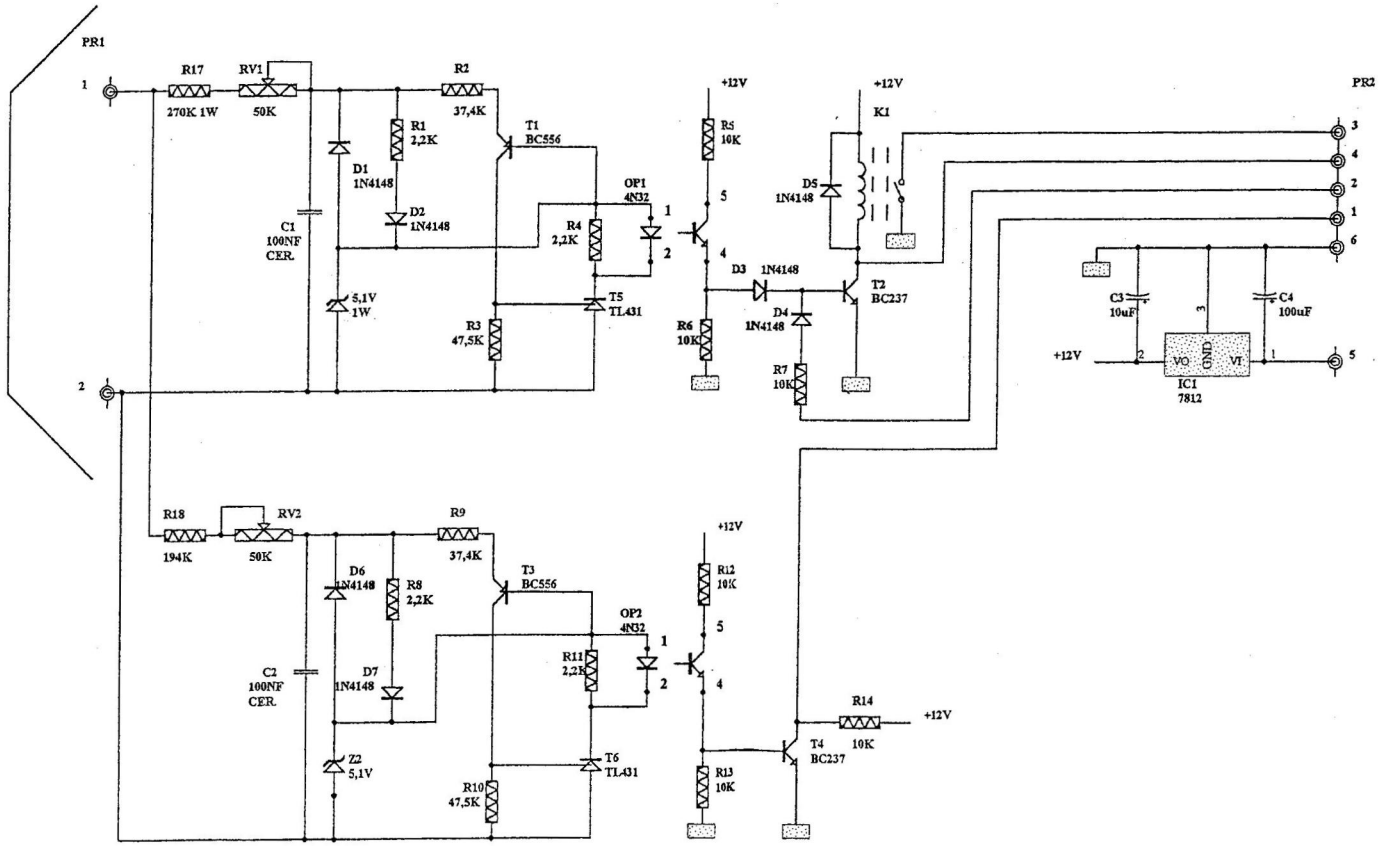
DATA DATE	DISEGNATO DA DRAWN BY	DESCRIZIONE DESCRIPTION	N° CODICE CODE N°.	ARCHIVIO CAD FILE
22/12/00	M.MATTAVELLI		10 S09 68S8200100	68S82401.DWG

DISEGNO DI PROPRIETA' AMEL s.r.l. e' vietata la riproduzione e la diffusione senza la nostra preventiva approvazione.
DRAWN IS PROPERTY OF AMEL s.r.l. Reproduction and diffusion without the company permission is forbidden.

SCHEDA INTERFACCIA CONSOLLE S100096

DISEGNO N° DRAWING N°	REVISIONE REVISION	FOGLIO SHEET	FORMATO SIZE
68S82401	00	1/1	A4E

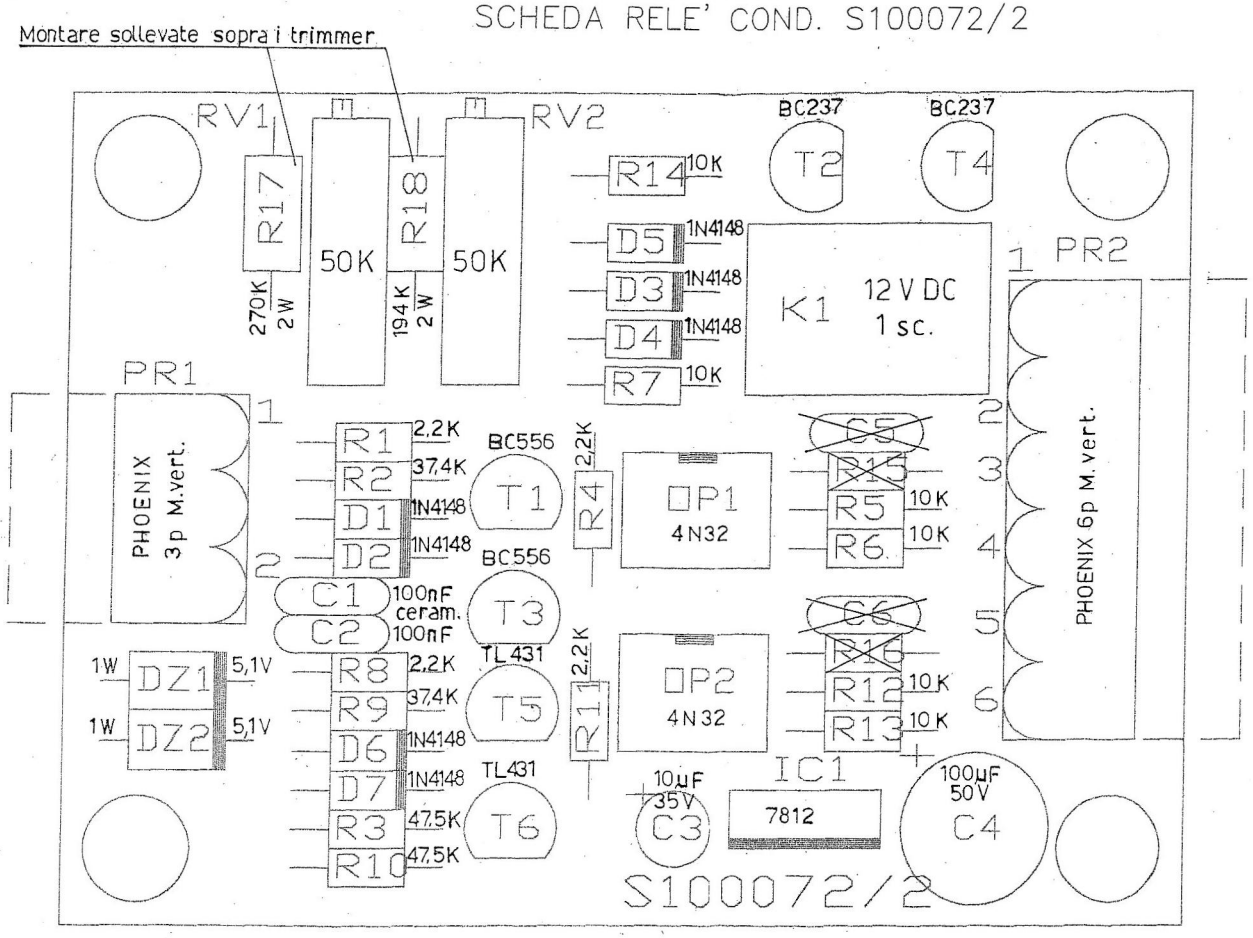
CONNECTED
ON THE
BOX CAPACITORS

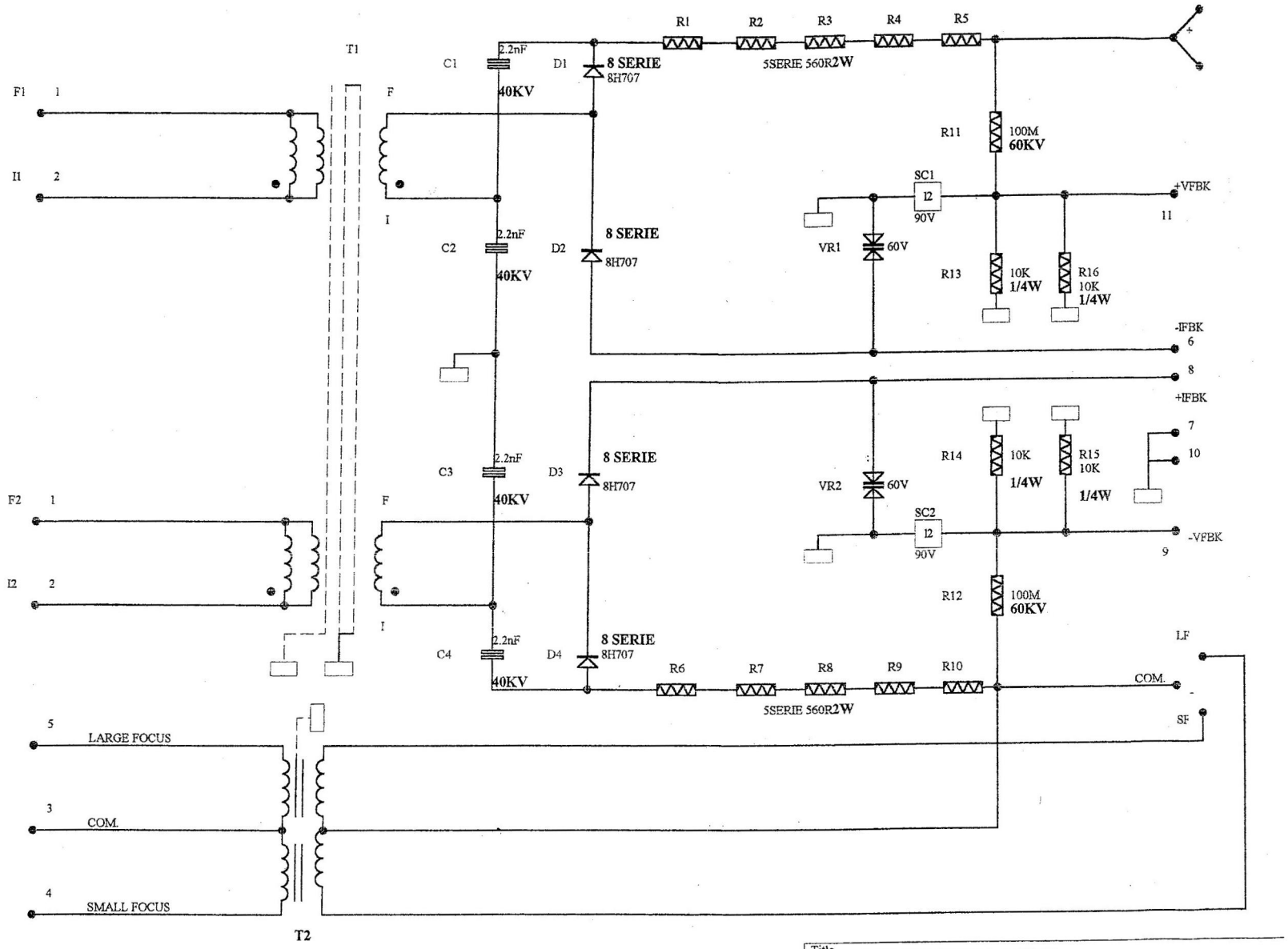


Title	RELE CAPACITORS PCB	
Size: B	Number: S000072-2	Revision: 2
Date: 15-Sep-2000		Sheet of
File: C:\CLIENT\S100072.SCH		Drawn By:

Cod. E 68 S 81

SCHEDA RELE' COND. S100072/2

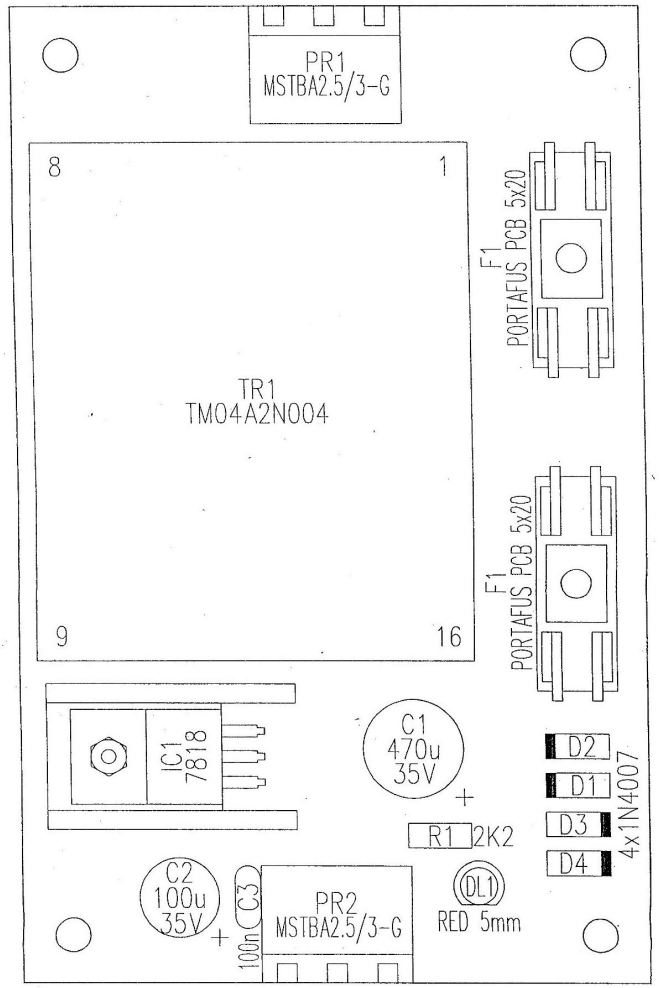




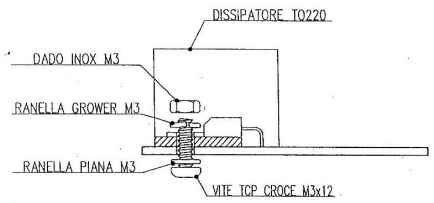
Title	SM2 TANK H.T. 16KHZ		
Size Orcad A	Number		Revision
Date:	2-Jul-2002	Sheet of	S000010
File:	C:\CLIENT\SM2B.~CH	Drawn By:	

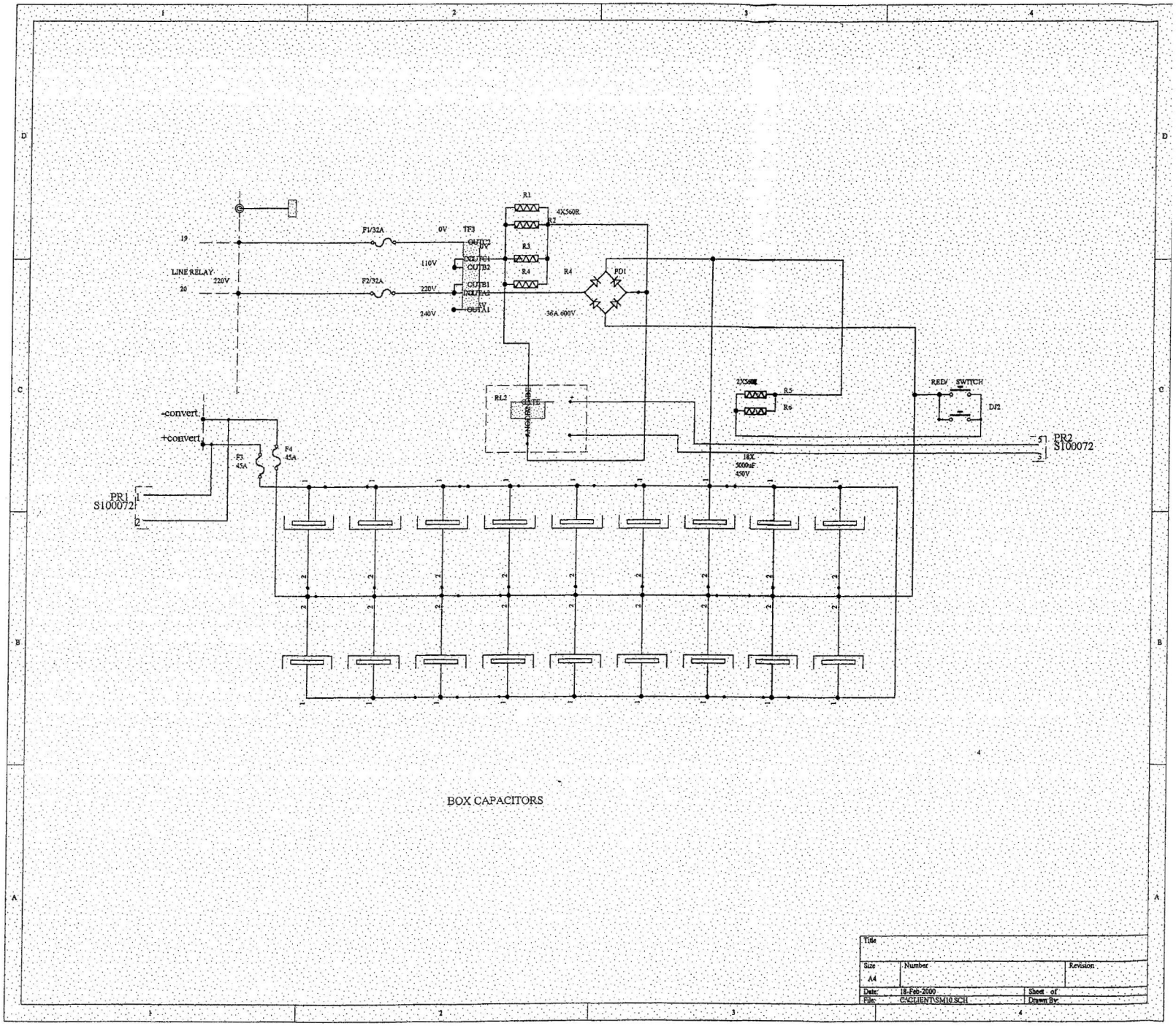
Cod. E 68 S A4

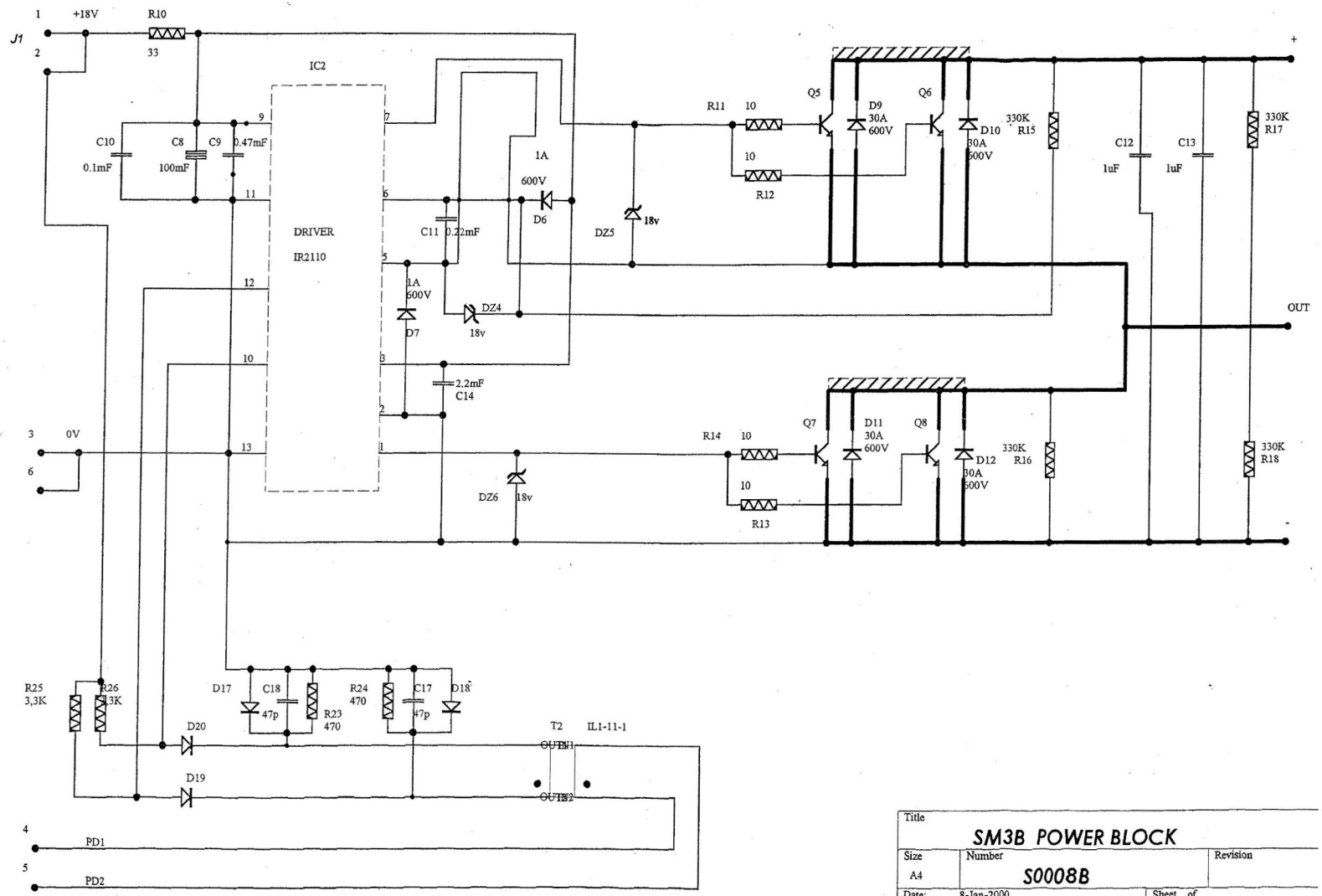
SCHEDA FEEDER P.B. S100031



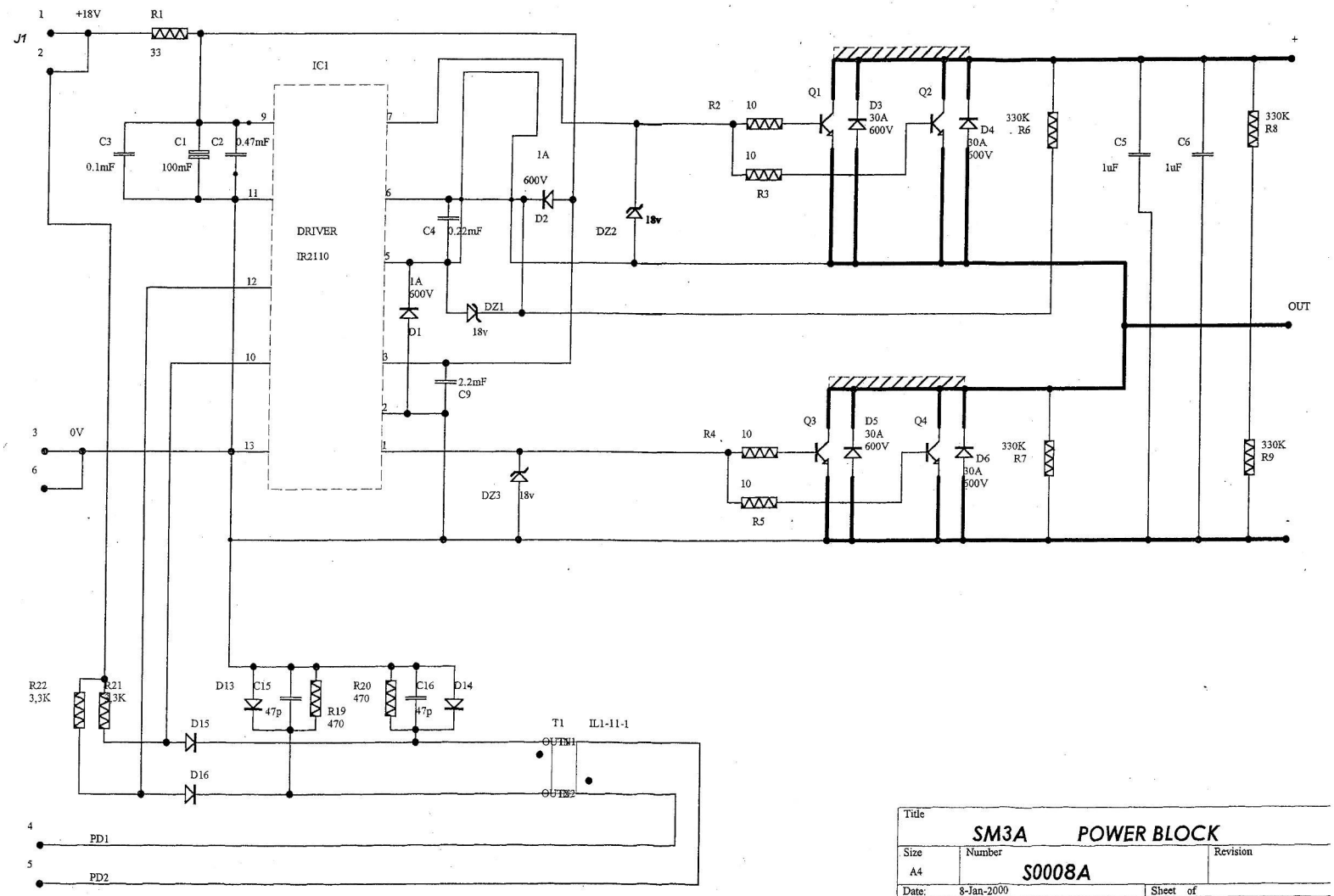
PARTICOLARE DI MONTAGGIO IC1




LINE RELAY
19
20
220V
F1/32A
F2/32A
0V
110V
220V
240V
TF3
OUTC2
OUTC1
OUTB2
OUTB1
OUTA2
OUTA1
R1
4X560R
R2
R3
R4
R4
PD1
36A 600V
RL2
ANODE
GATE
2X560R
R5
R6
RED/ SWITCH
DF2
PR2
S100072
5
3
16X
5000uF
450V
-convert
+convert
F3
45A
F4
45A
PR1
S100072
1
2
BOX CAPACITORS
Title
Size
A4
Number
Revision
Date:
18-Feb-2000
Sheet of
File:
C:\CLIENTS\M10.SCH
Drawn By:



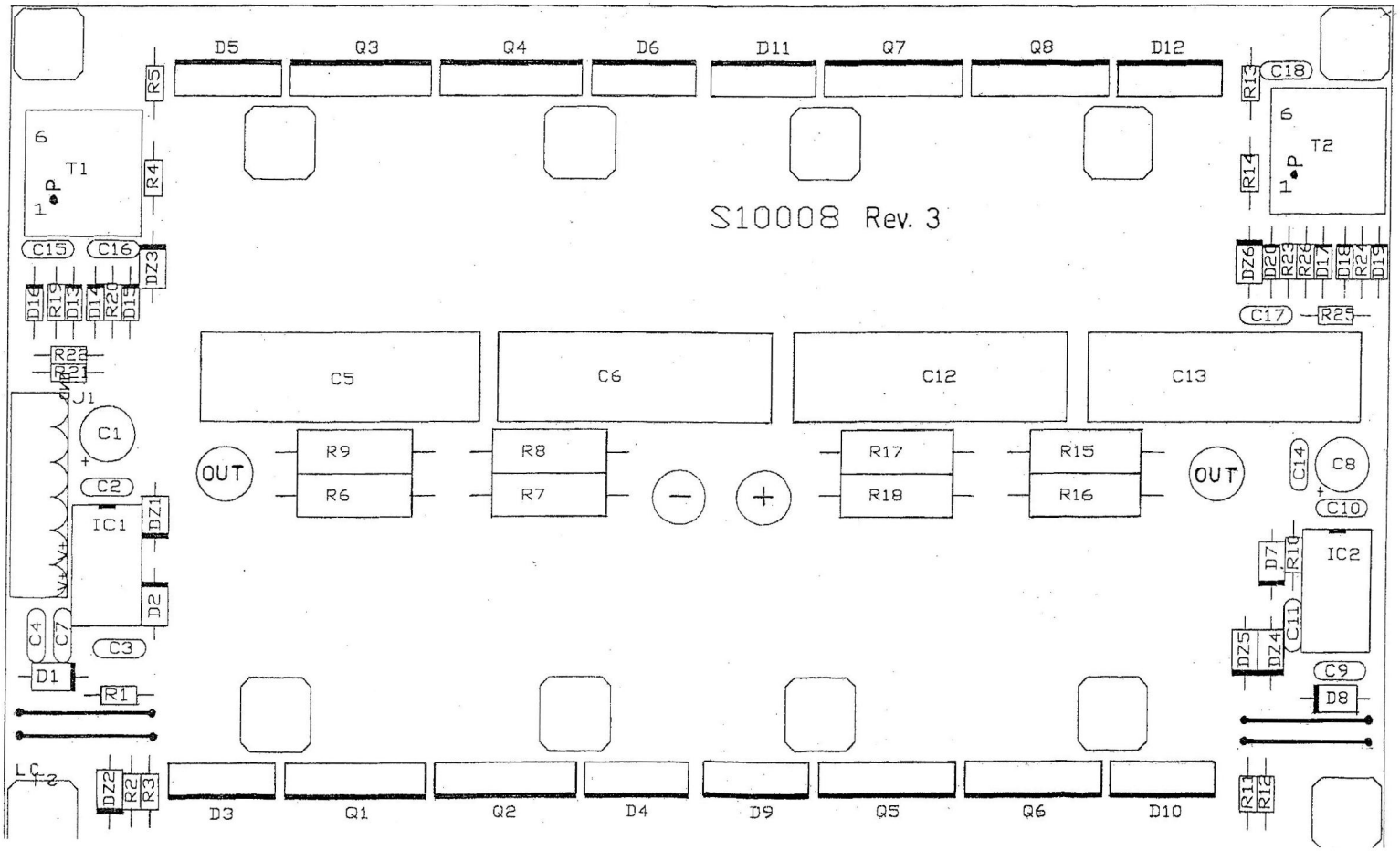
Title	SM3B POWER BLOCK	
Size: A4	Number: S0008B	Revision:
Date: 8-Jan-2000		Sheet of
File: C:\SM3B.SCH		Drawn By:

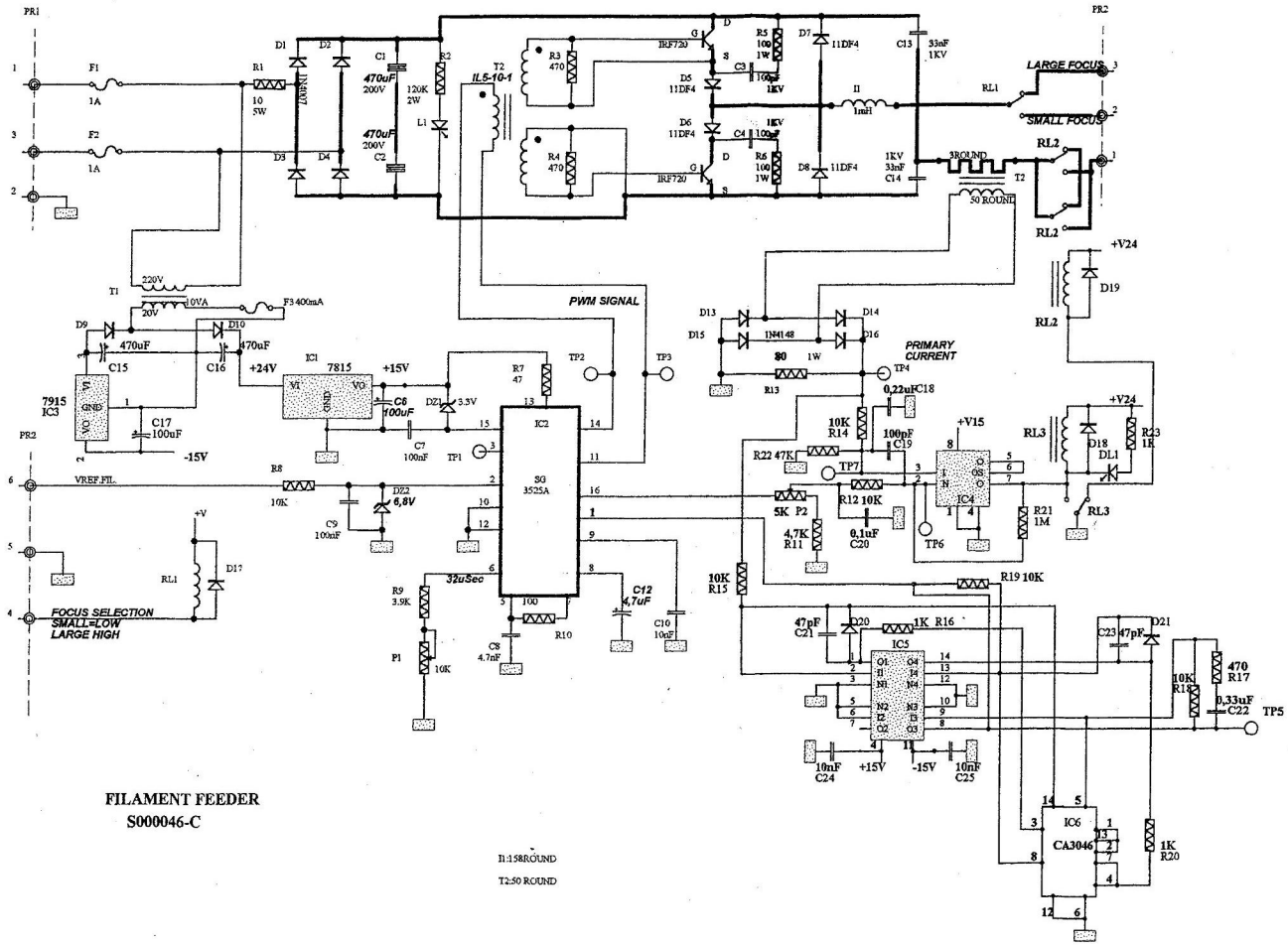


Title	SM3A POWER BLOCK	
Size: A4	Number: S0008A	Revision:
Date: 8-Jan-2000		Sheet of
File: C:\SM3A.SCH		Drawn By:

Cod. E 68 S A 6

SCHEDA POWER BLOCK S10008 Rev. 3



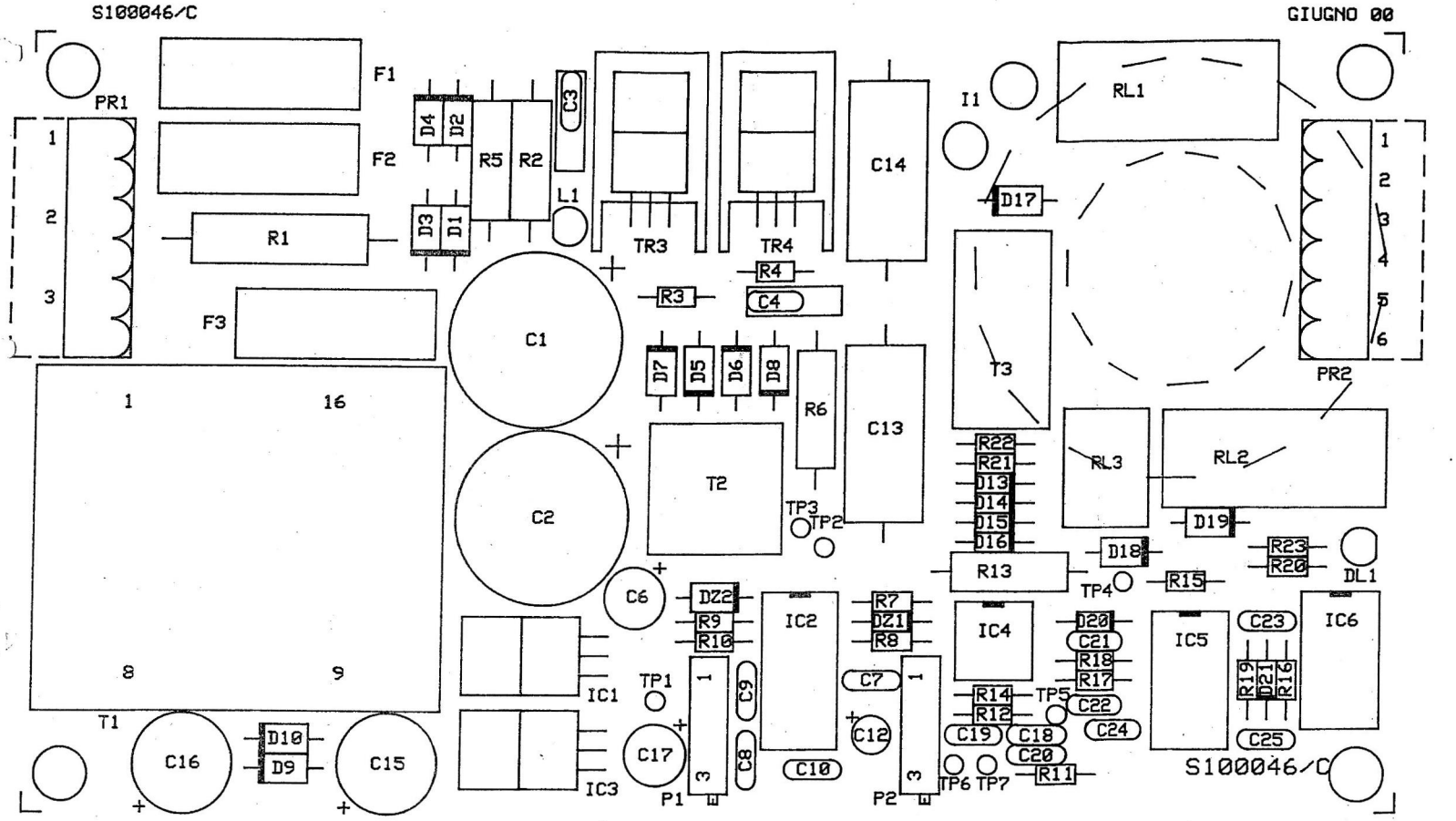


FILAMENT FEEDER
S000046-C

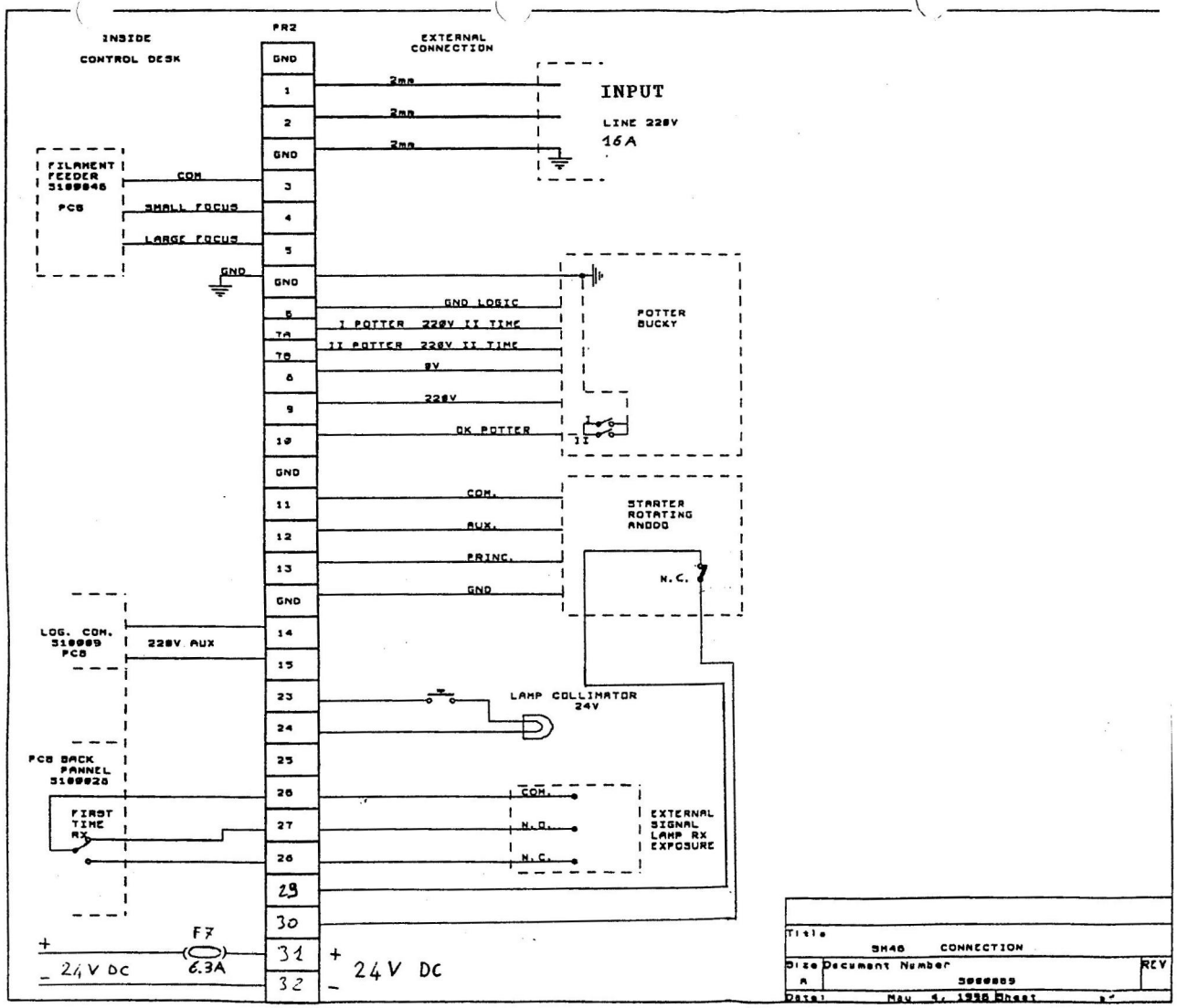
T1:158ROUND

T2:50 ROUND

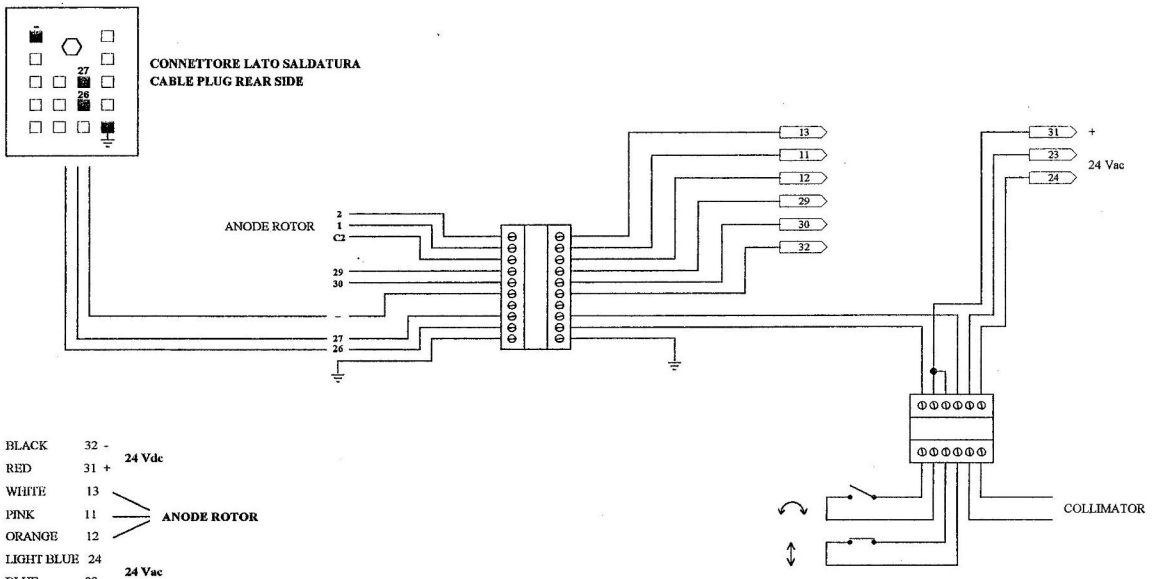
Title	FILAMENT FEEDER		
Size A3	Number S000046C		Revision C
Date: 30-Jan-2001		Sheet of	
File: C:\CLIENTS\S27A.SCH		Drawn By:	



				DESCRIZIONE: VISTA DI MONTAGGIO E68S77
NOME: B.C.D.	DATA: 20-10-00	SCALA: 1.5:1	DIS. N: 1	S100046/C

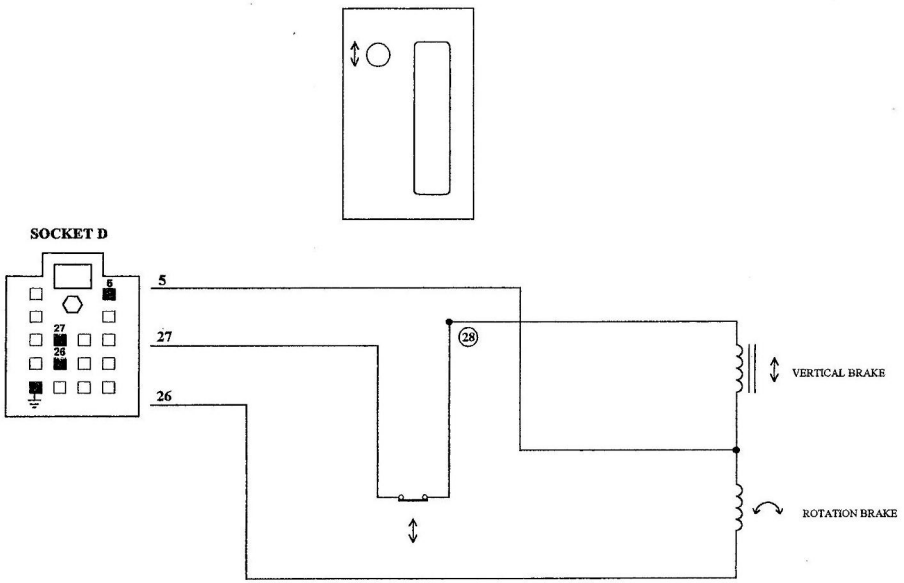


Title	SM46 CONNECTION	
Size A	Document Number 3000889	REV
Date: May 4, 1998	Sheet	



Equipment: **WIZ-RAD**			
Title: **GENERAL CONNECTION**			
n°. **K 610004**	Rev: **1.0**		
File: D:\SCHEMI\MULTIG\610004.SCH	Time: 15:35:25 Date: 7-Jun-2001	Sheet: **0** of: **0**	Size: **A4**

PUSH BUTTON PANEL B



Equipment: **MULTIGRAPH D.F.F.F.**			
Title: **CONTROL KEY SWITCH BOX**			
n°. **K 6102**	Rev: **0**		
File: D:\SCHEM\MULTIGK6102A.SCH	Time: 15:37:26 Date: 7-Jun-2001	Sheet: **0** of: **0**	Size: **A4**

FIGURE N.6